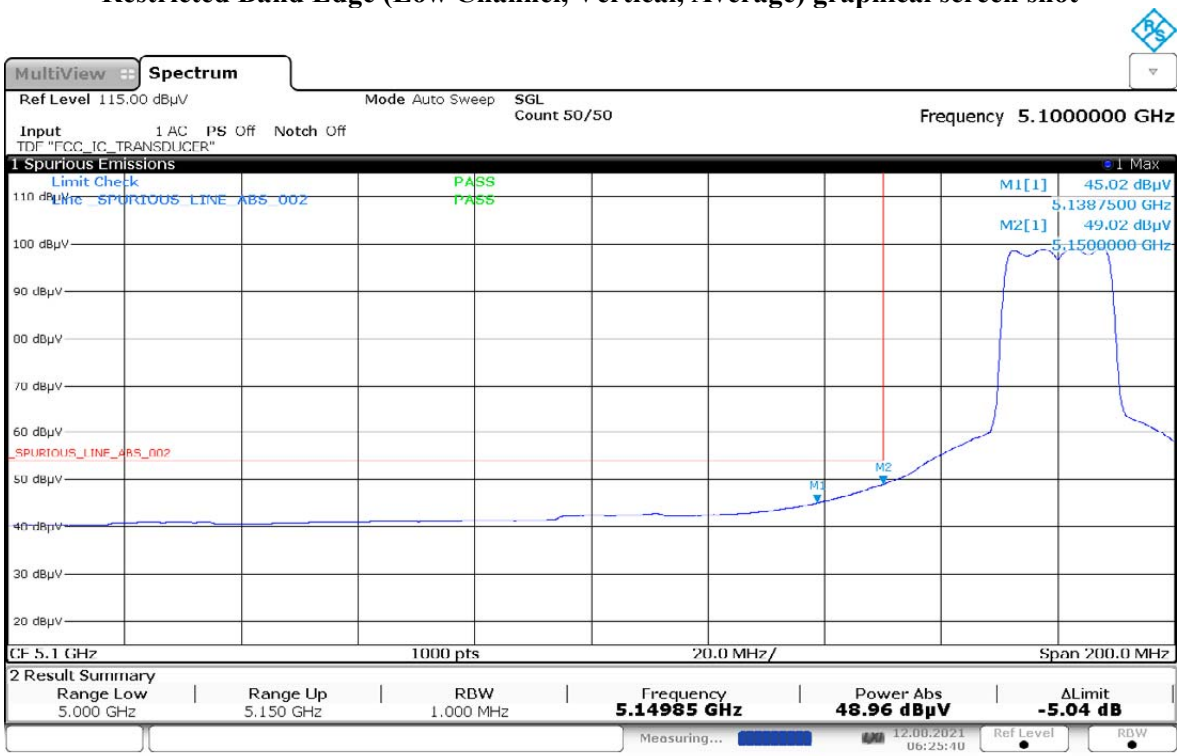
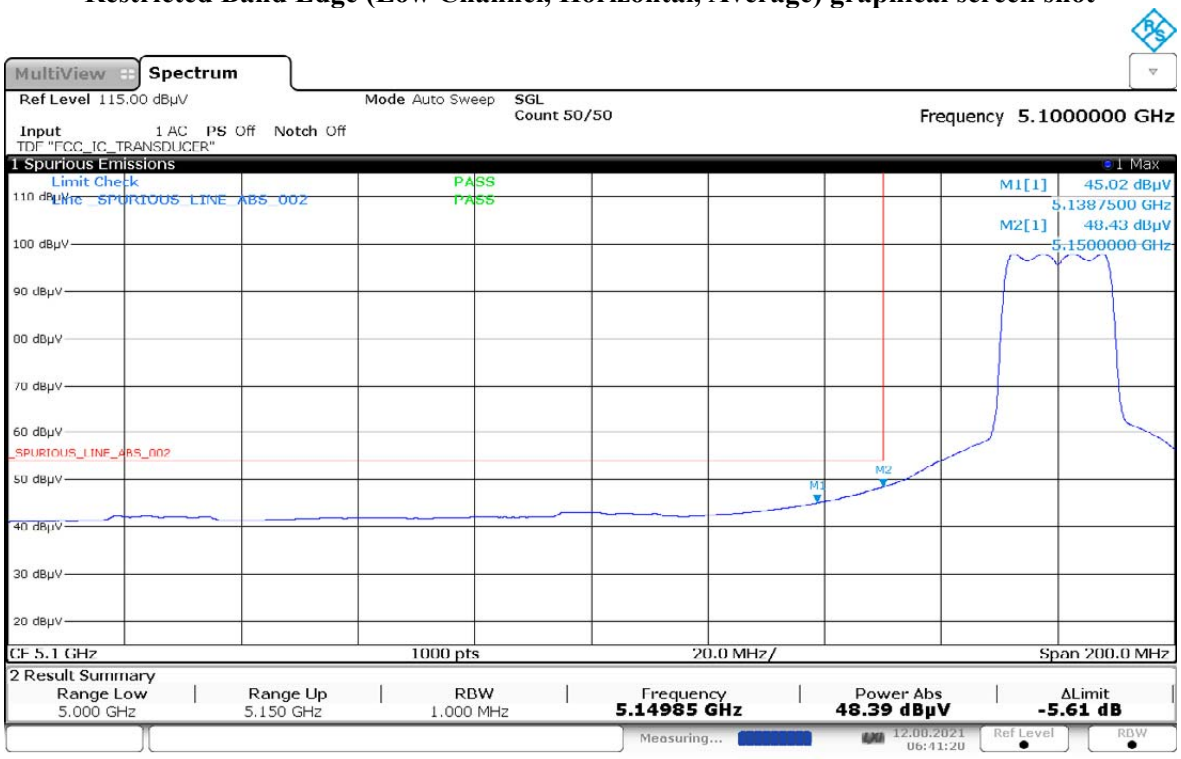
Restricted Band Edge (Low Channel, Vertical, Average) graphical screen shot



06:25:40 12.08.2021

Restricted Band Edge (Low Channel, Horizontal, Average) graphical screen shot



06:41:20 12.08.2021

Test: WIFI SAC Restricted Band Edge
Model Number: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00122
Battery: PMNN4810A Accessory: NA
Test Channel: High Test Frequency: 5320.0000 MHz Test Standards: ANSI C63.10-2013 Worst Case Plane: X-Plane (802.11n 20MHz)

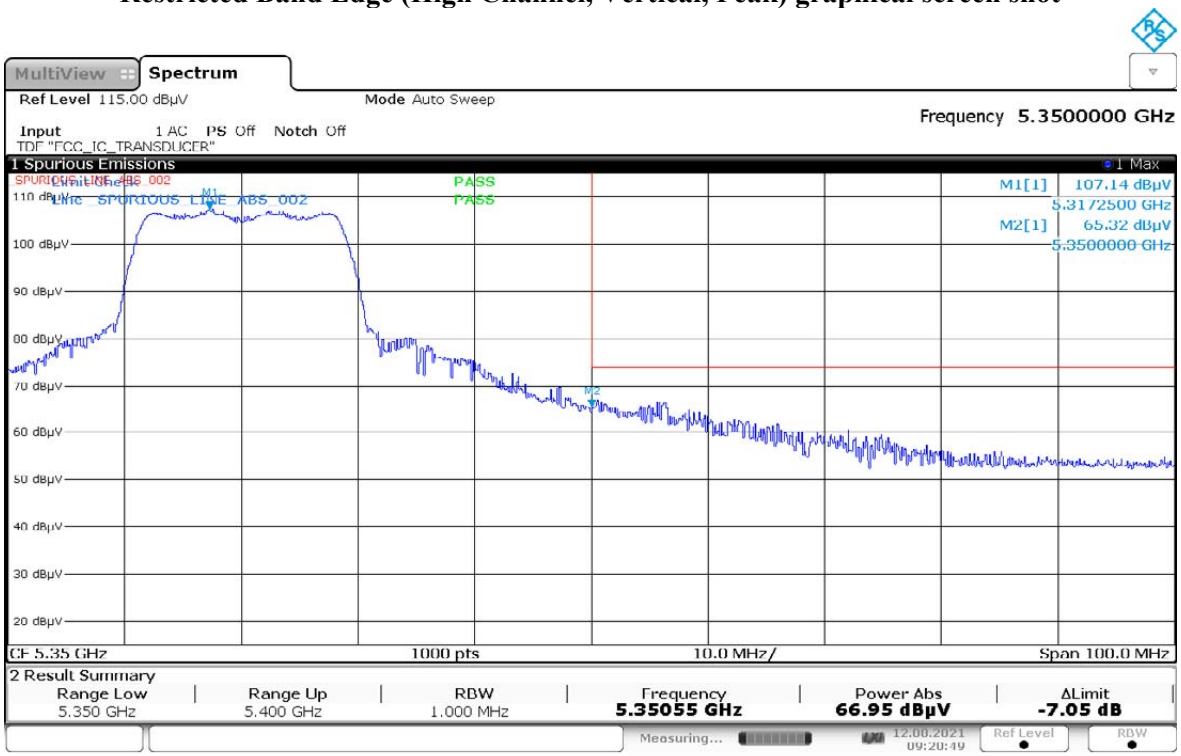
Restricted Band Edge (High Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5350.0000	-	65.3224	47.3543	-	74.0000	54.0000	-	-8.6776	-6.6457	-
Horizontal Radiated Emission Result										
5350.0000	-	56.4409	43.0593	-	74.0000	54.0000	-	-17.5591	-10.9407	-

Remarks: Pass Result	Marginal Result	Fail Result

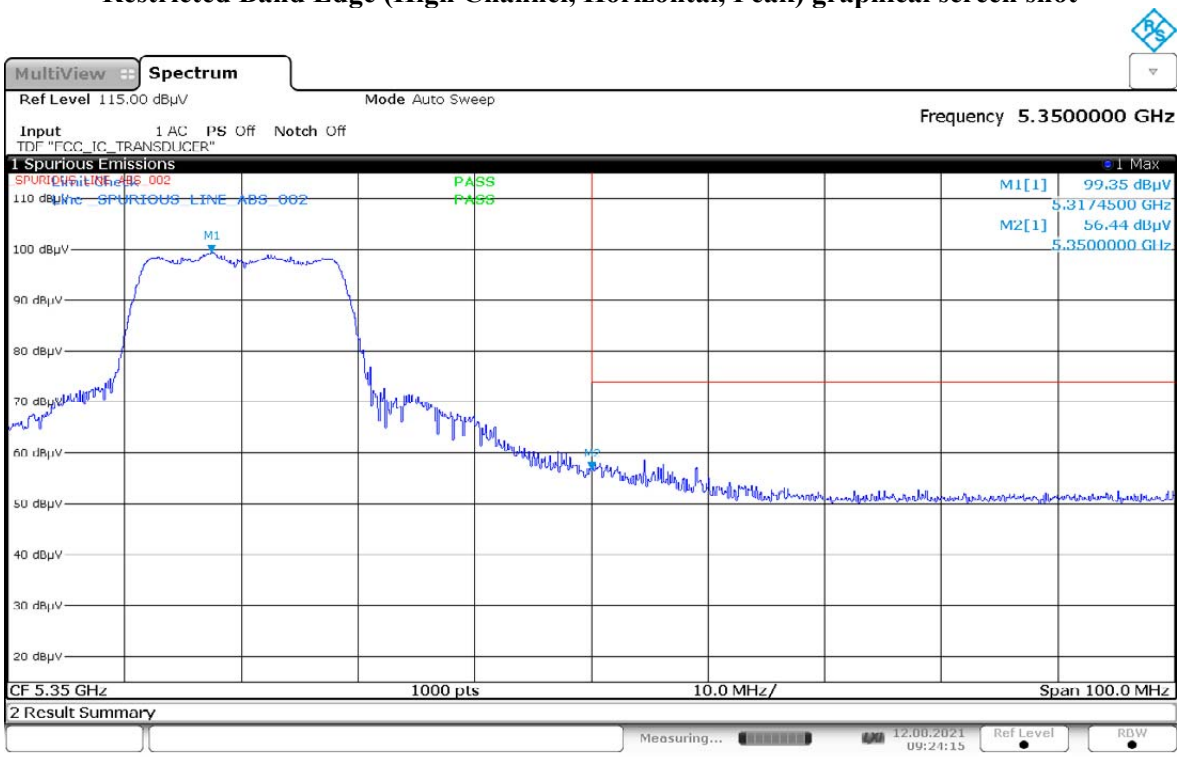
Temperature (degC): 23.2
Humidity (%): 70.0
Test Performed by: Azil
Test Date: Thu, 12 Aug, 2021
System MU: 4.03dB

Restricted Band Edge (High Channel, Vertical, Peak) graphical screen shot



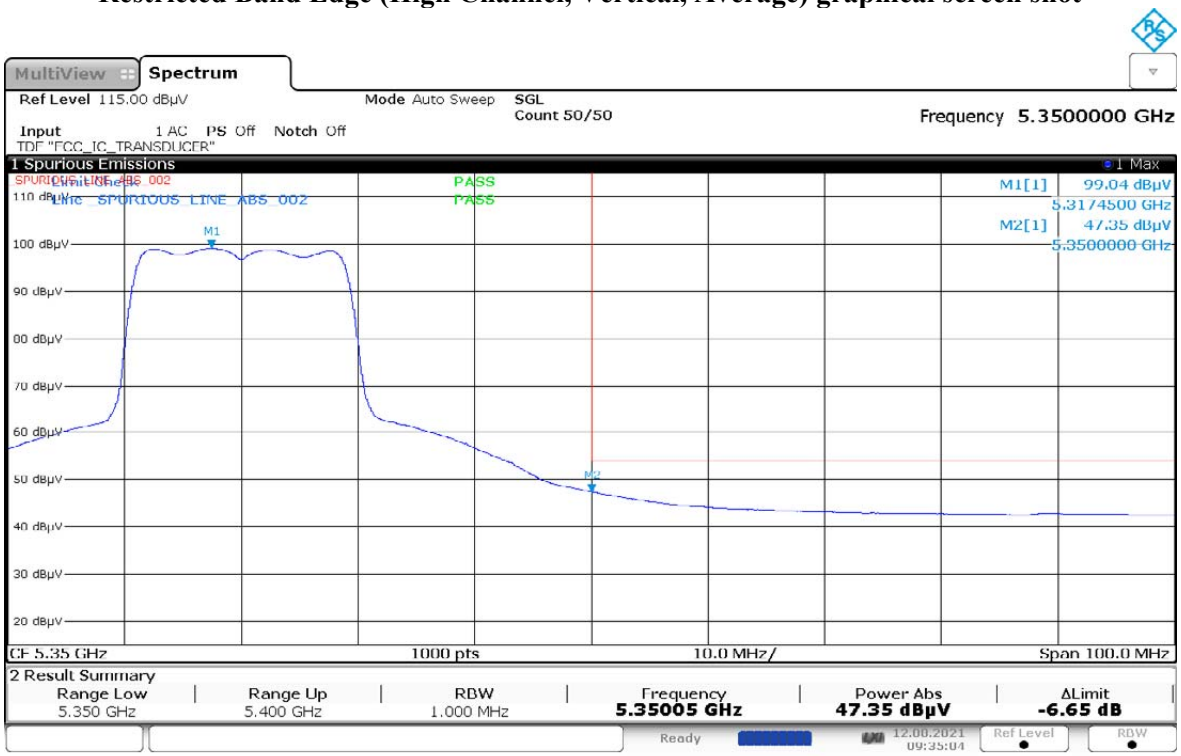
09:20:49 12.08.2021

Restricted Band Edge (High Channel, Horizontal, Peak) graphical screen shot



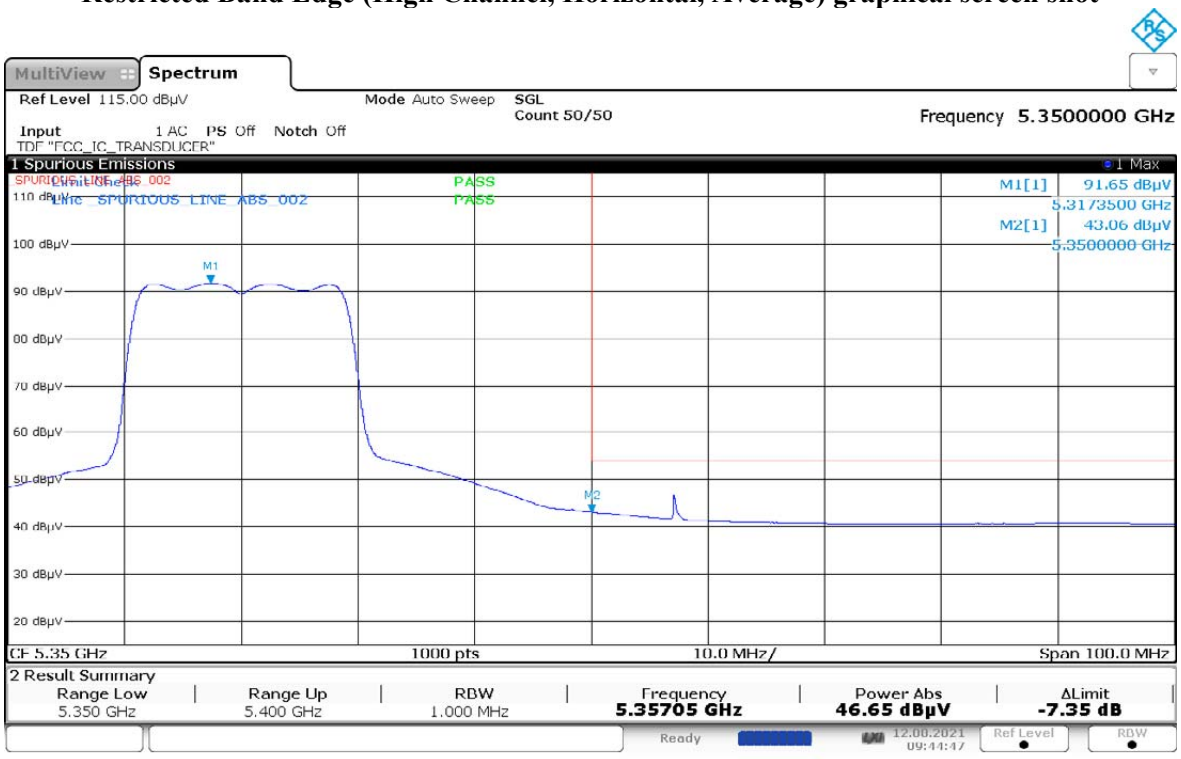
09:24:16 12.08.2021

Restricted Band Edge (High Channel, Vertical, Average) graphical screen shot



09:35:04 12.08.2021

Restricted Band Edge (High Channel, Horizontal, Average) graphical screen shot



09:44:47 12.08.2021

Test: WIFI SAC Restricted Band Edge
Model Number: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00122
Battery: PMNN4810A Accessory: NA
Test Channel: Low Test Frequency: 5500.0000 MHz Test Standards: ANSI C63.10-2013 Worst Case Plane: X-Plane (802.11n 20MHz)

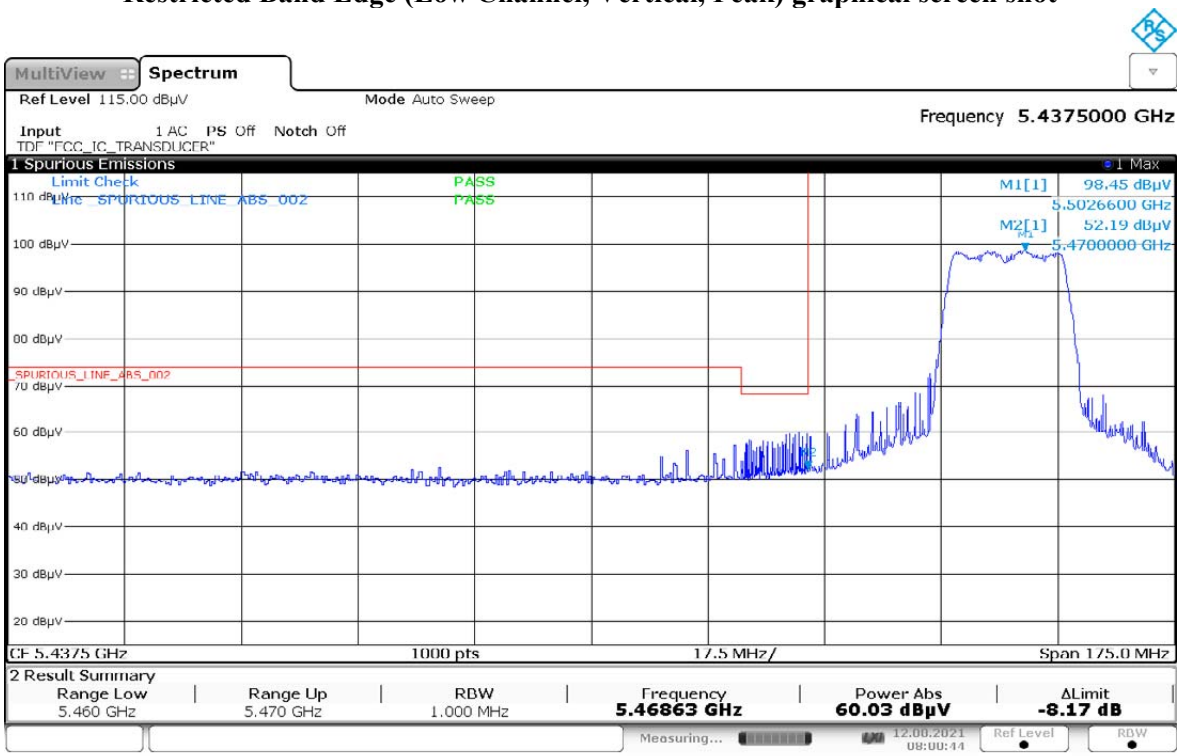
Restricted Band Edge (Low Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5460.0000	-	-	41.8288	-	-	54.0000	-	-	-12.1712	-
5468.6250	-	60.0276	-	-	68.2000	-	-	-8.1724	-	-
5470.0000	-	52.1889	-	-	68.2000	-	-	-16.0111	-	-
Horizontal Radiated Emission Result										
5460.0000	-	-	40.5506	-	-	54.0000	-	-	-13.4494	-
5469.9250	-	61.6118	-	-	68.2000	-	-	-6.5882	-	-
5470.0000	-	51.0972	-	-	68.2000	-	-	-17.1028	-	-

Remarks: Pass Result	Marginal Result	Fail Result

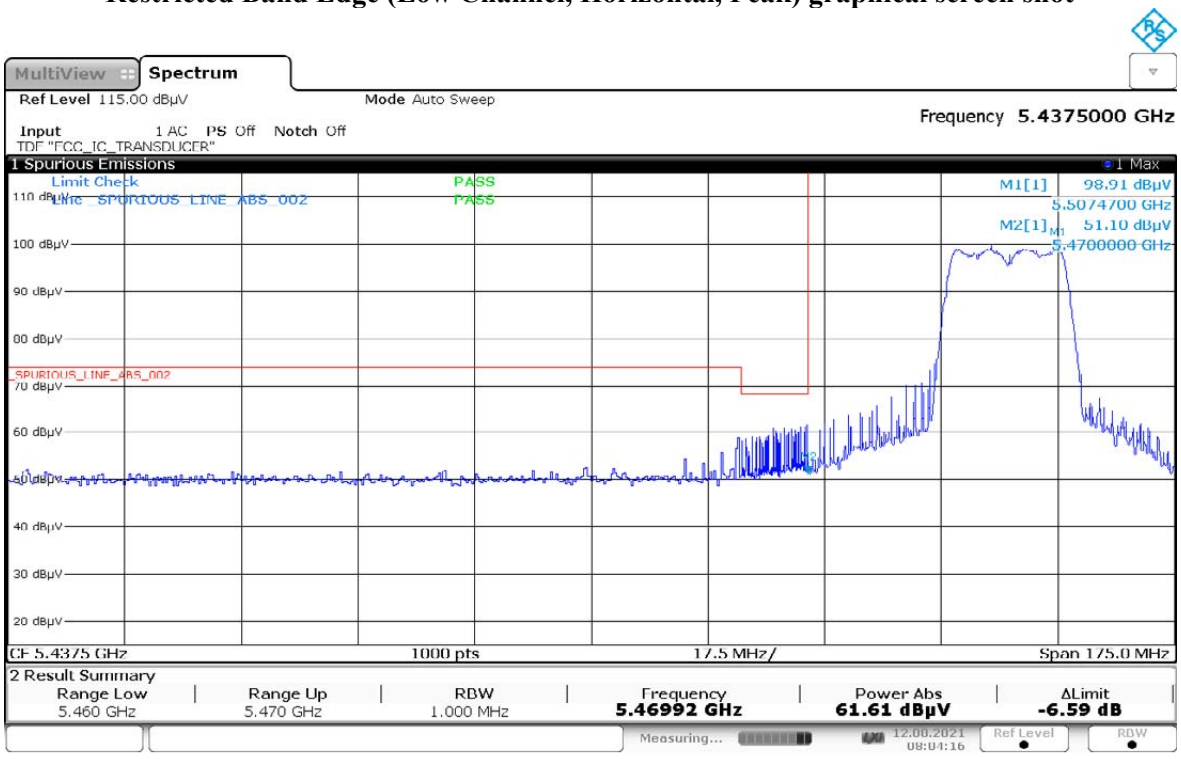
Temperature (degC): 23.2
Humidity (%): 70.0
Test Performed by: Azil
Test Date: Thu, 12 Aug, 2021
System MU: 4.03dB

Restricted Band Edge (Low Channel, Vertical, Peak) graphical screen shot



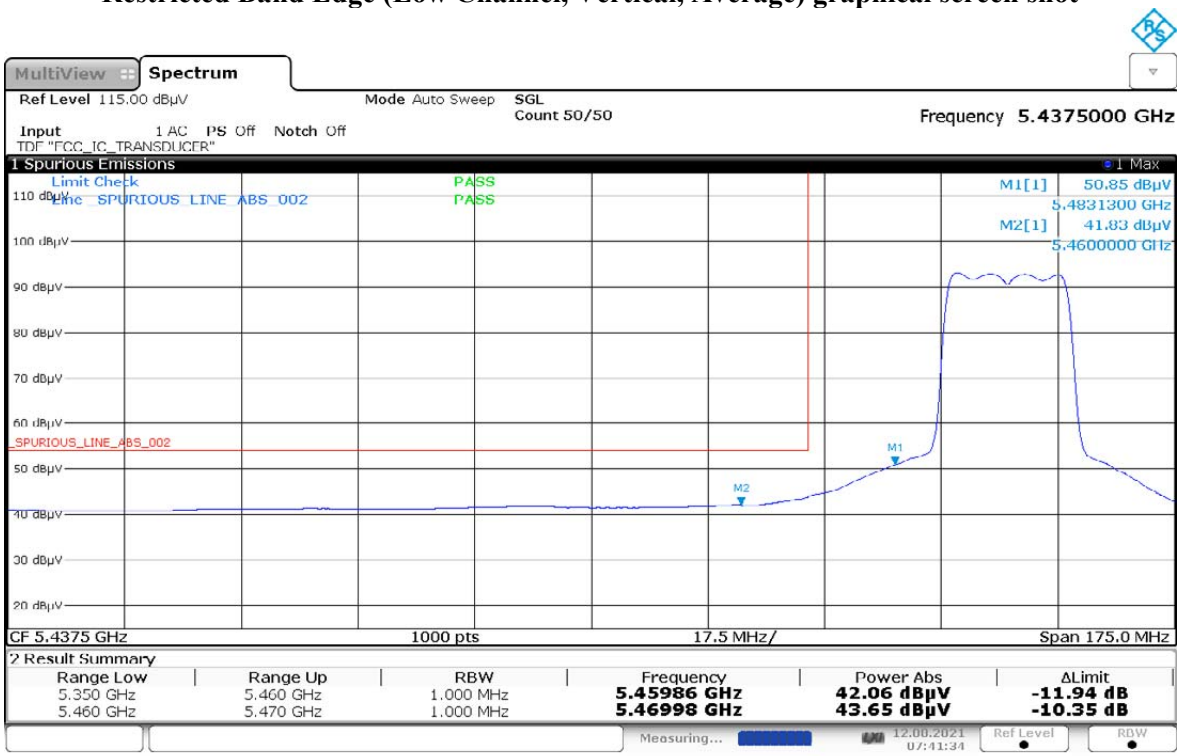
08:00:45 12.08.2021

Restricted Band Edge (Low Channel, Horizontal, Peak) graphical screen shot



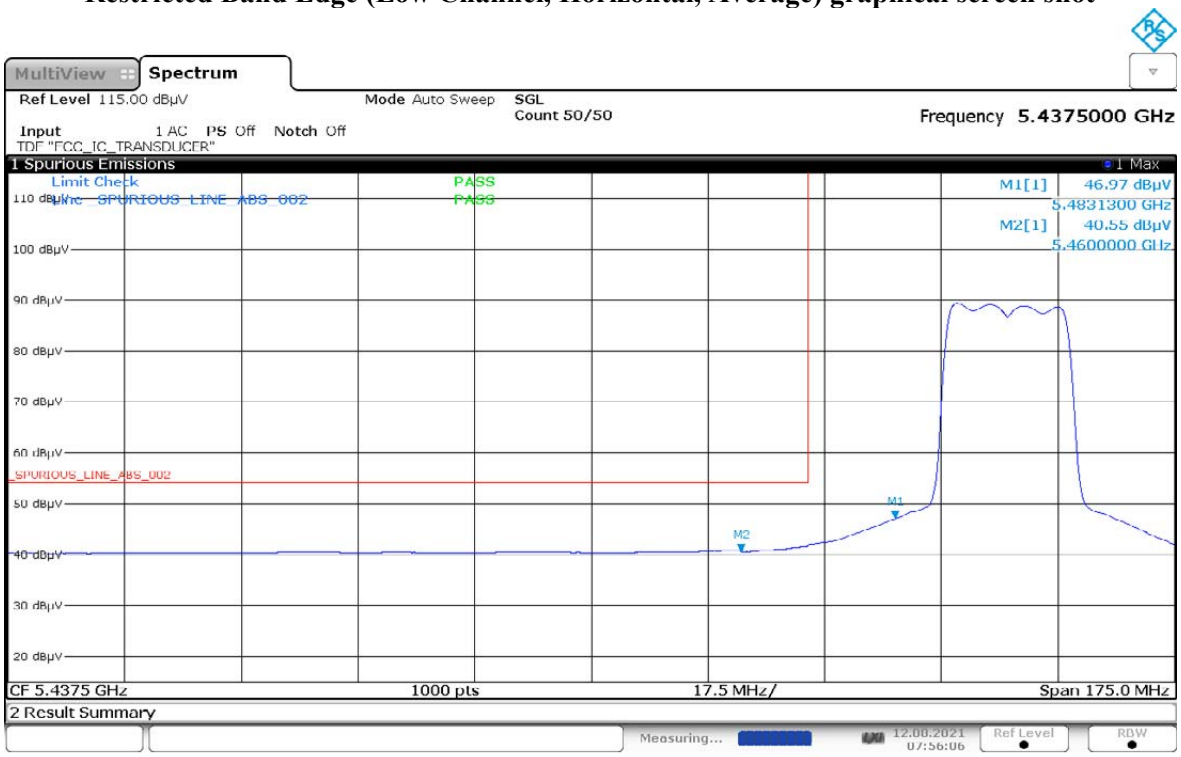
08:04:17 12.08.2021

Restricted Band Edge (Low Channel, Vertical, Average) graphical screen shot



07:41:35 12.08.2021

Restricted Band Edge (Low Channel, Horizontal, Average) graphical screen shot



07:56:06 12.08.2021

Test: WIFI SAC Restricted Band Edge
Model Number: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: High Test Frequency: 5700.0000 MHz Test Standards: ANSI C63.10-2013 Worst Case Plane: X-Plane (802.11n 20MHz)

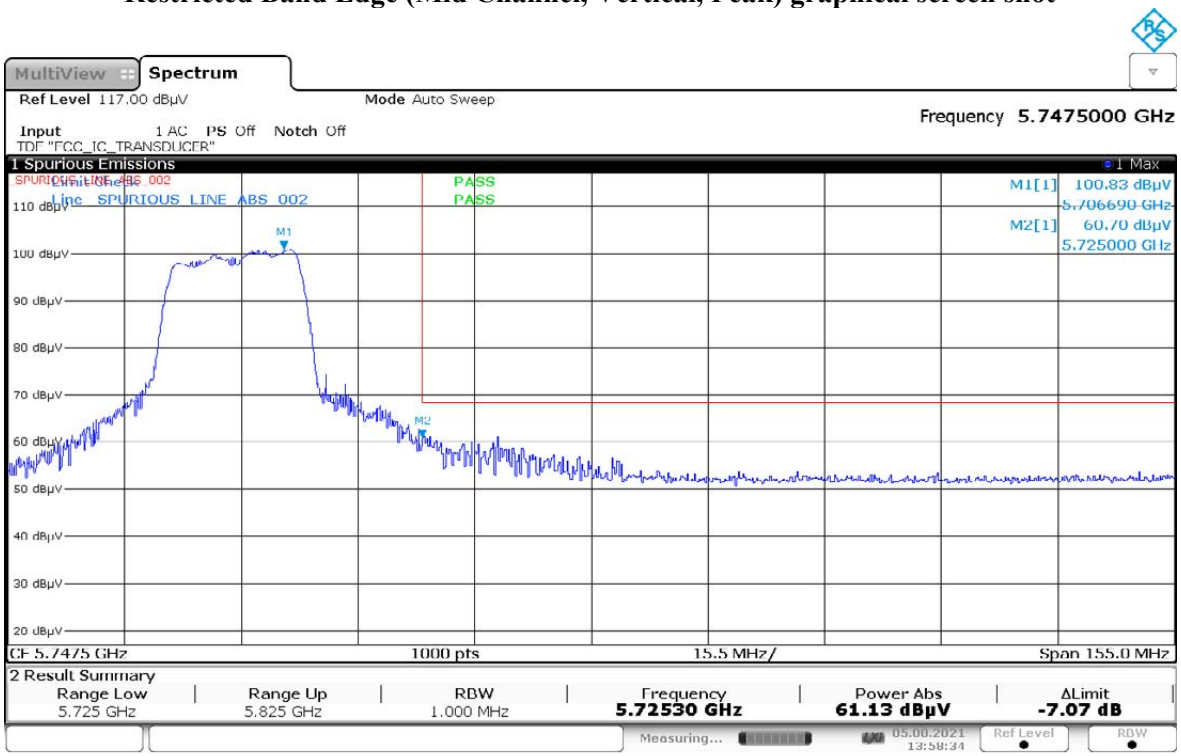
Restricted Band Edge (High Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5725.0000	-	60.6955	46.6255	-	68.2000	54.0000	-	-7.5045	-7.3745	-
Horizontal Radiated Emission Result										
5725.0000	-	61.5810	43.9161	-	68.2000	54.0000	-	-6.6190	-10.0839	-

Remarks: Pass Result	Marginal Result	Fail Result

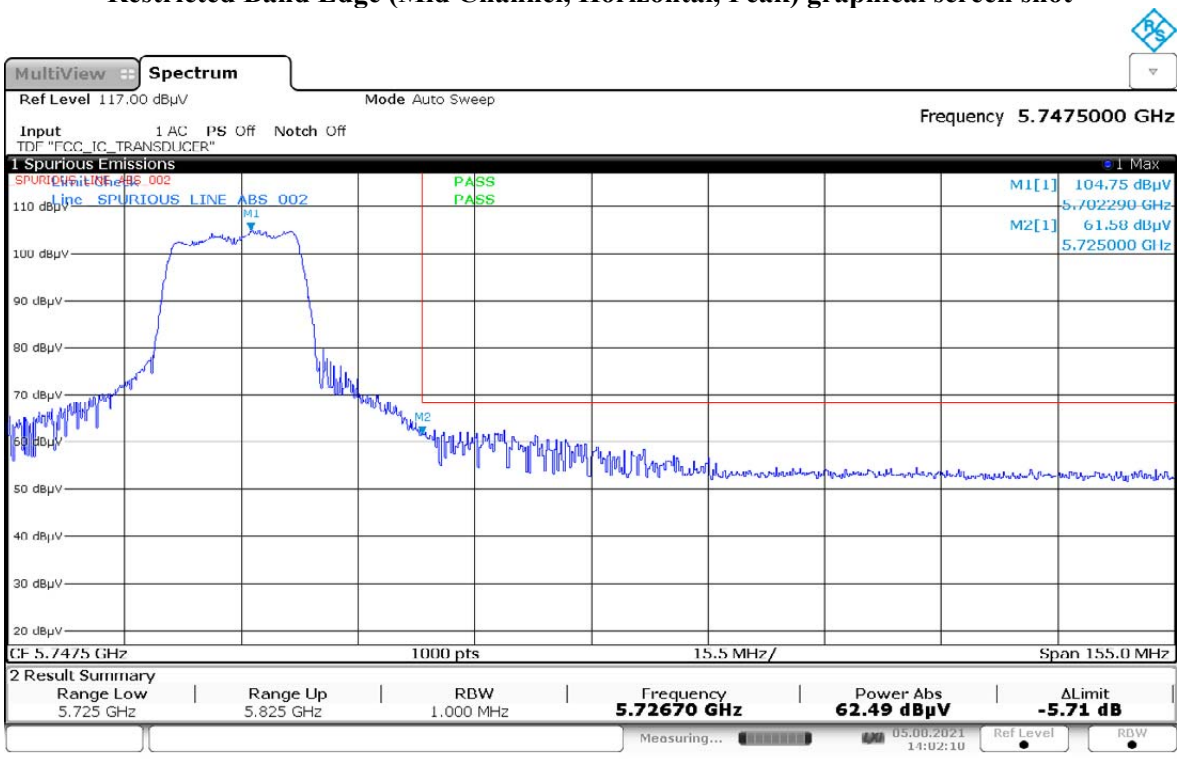
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Thu, 5 Aug, 2021**
System MU: 4.03dB

Restricted Band Edge (Mid Channel, Vertical, Peak) graphical screen shot



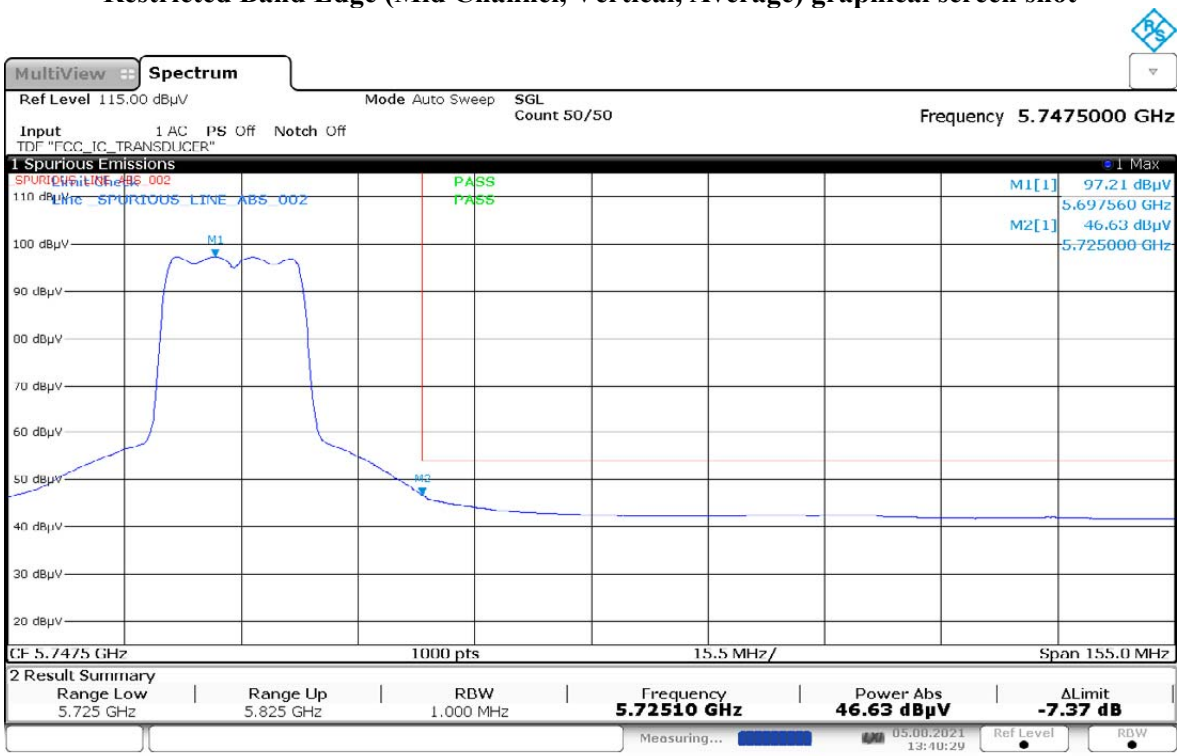
13:58:35 05.08.2021

Restricted Band Edge (Mid Channel, Horizontal, Peak) graphical screen shot



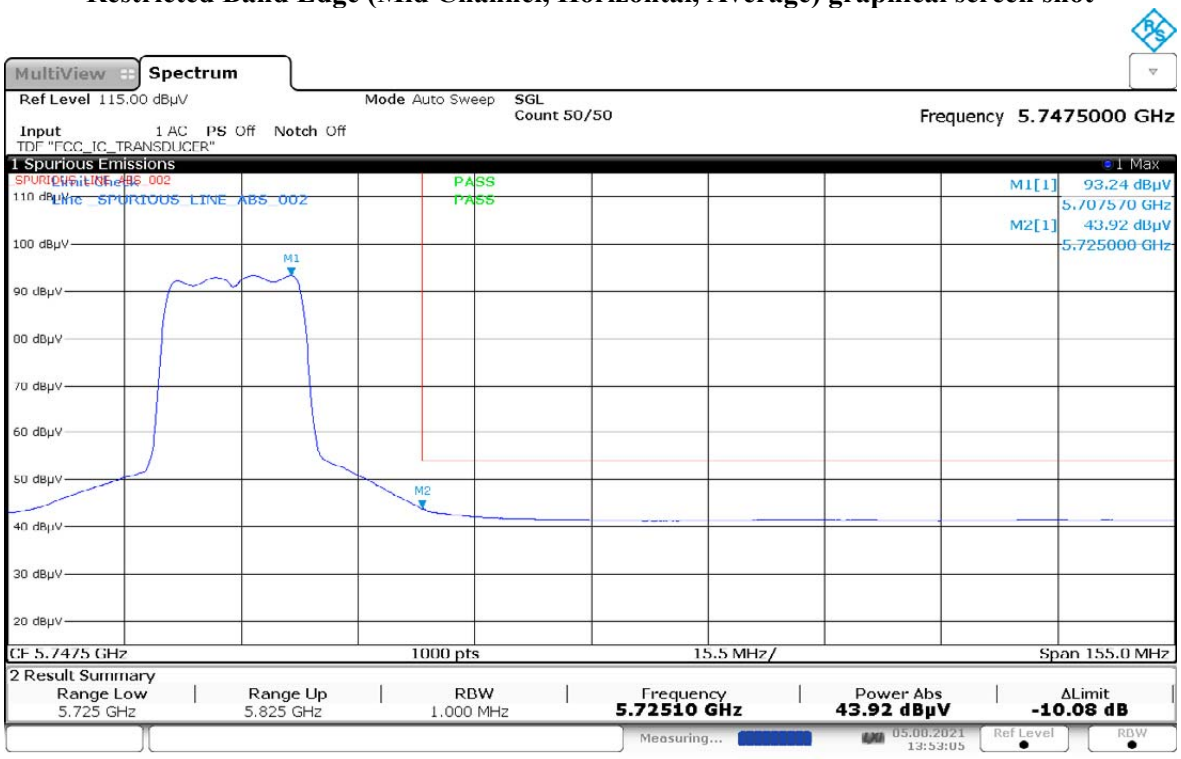
14:02:11 05.08.2021

Restricted Band Edge (Mid Channel, Vertical, Average) graphical screen shot



13:40:29 05.08.2021

Restricted Band Edge (Mid Channel, Horizontal, Average) graphical screen shot



13:53:05 05.08.2021

Test: WIFI SAC Restricted Band Edge
Model Number: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: Straddle Test Frequency: 5720.0000 MHz Test Standards: ANSI C63.10-2013 Worst Case Plane: X-Plane (802.11n 20MHz)

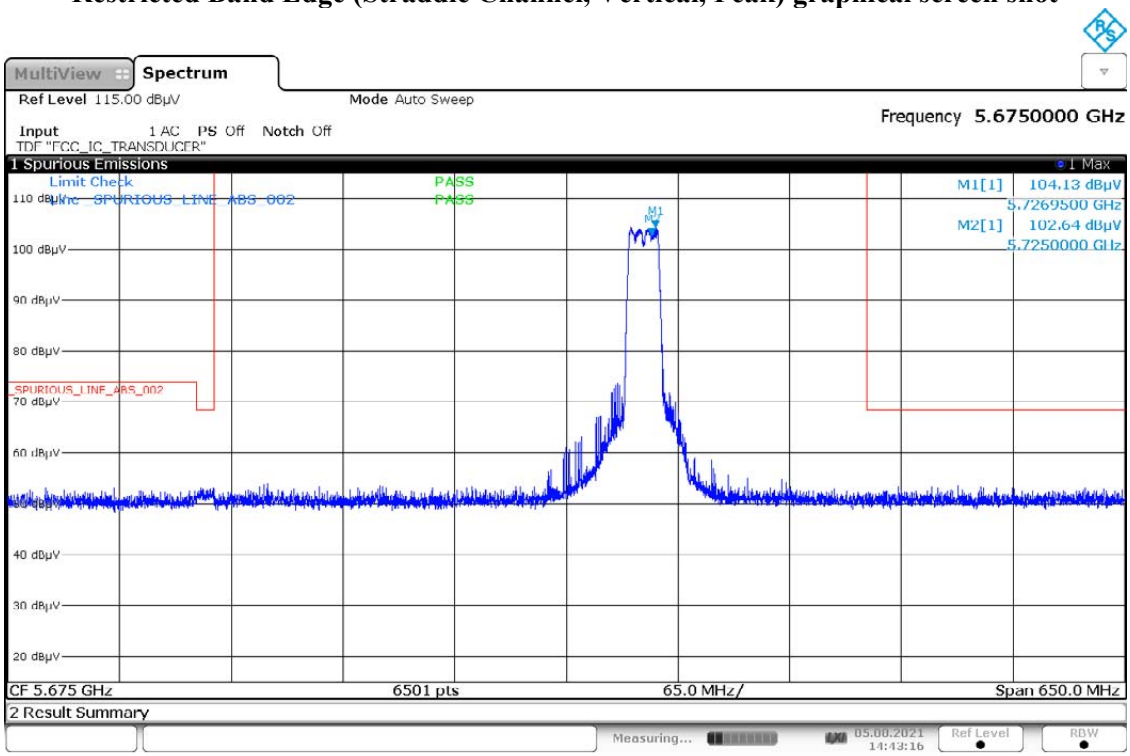
Restricted Band Edge (Straddle Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
Horizontal Radiated Emission Result										

Remarks: Pass Result	Marginal Result	Fail Result

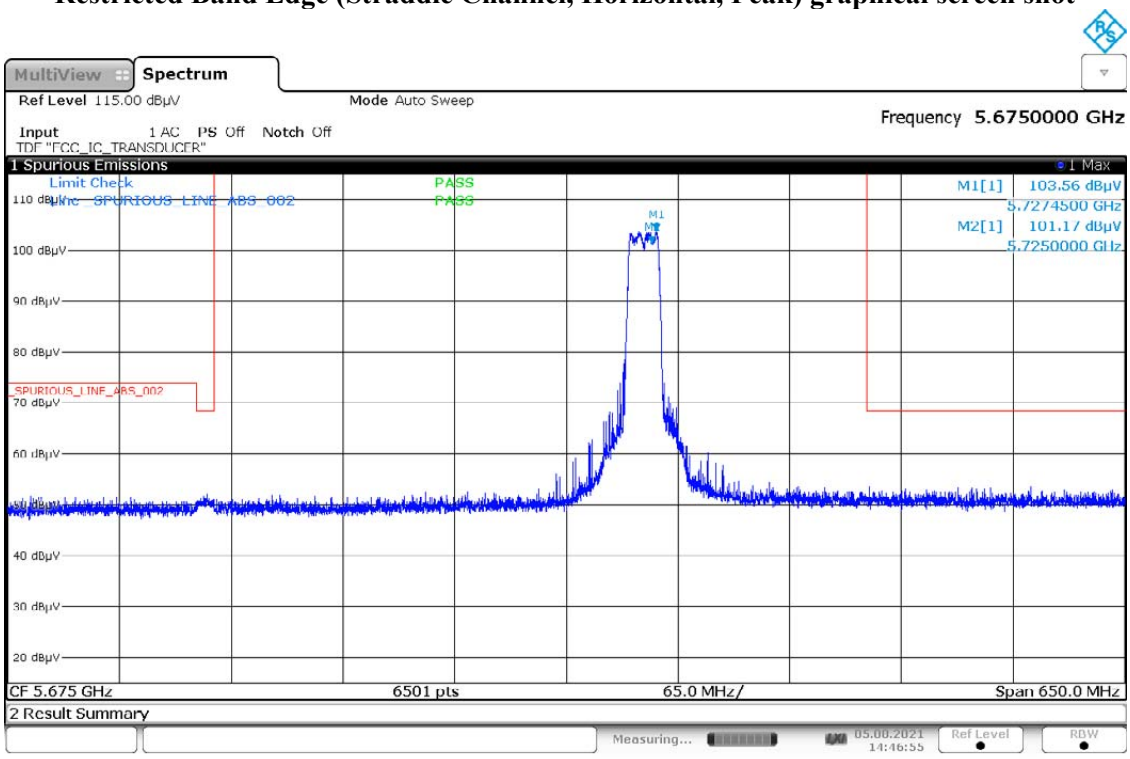
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Thu, 5 Aug, 2021**
System MU: 4.03dB

Restricted Band Edge (Straddle Channel, Vertical, Peak) graphical screen shot



14:43:17 05.08.2021

Restricted Band Edge (Straddle Channel, Horizontal, Peak) graphical screen shot



14:46:56 05.08.2021

Test: WIFI SAC Restricted Band Edge
Model Number: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: Low Test Frequency: 5745.0000 MHz Test Standards: ANSI C63.10-2013 Worst Case Plane: X-Plane (802.11n 20MHz)

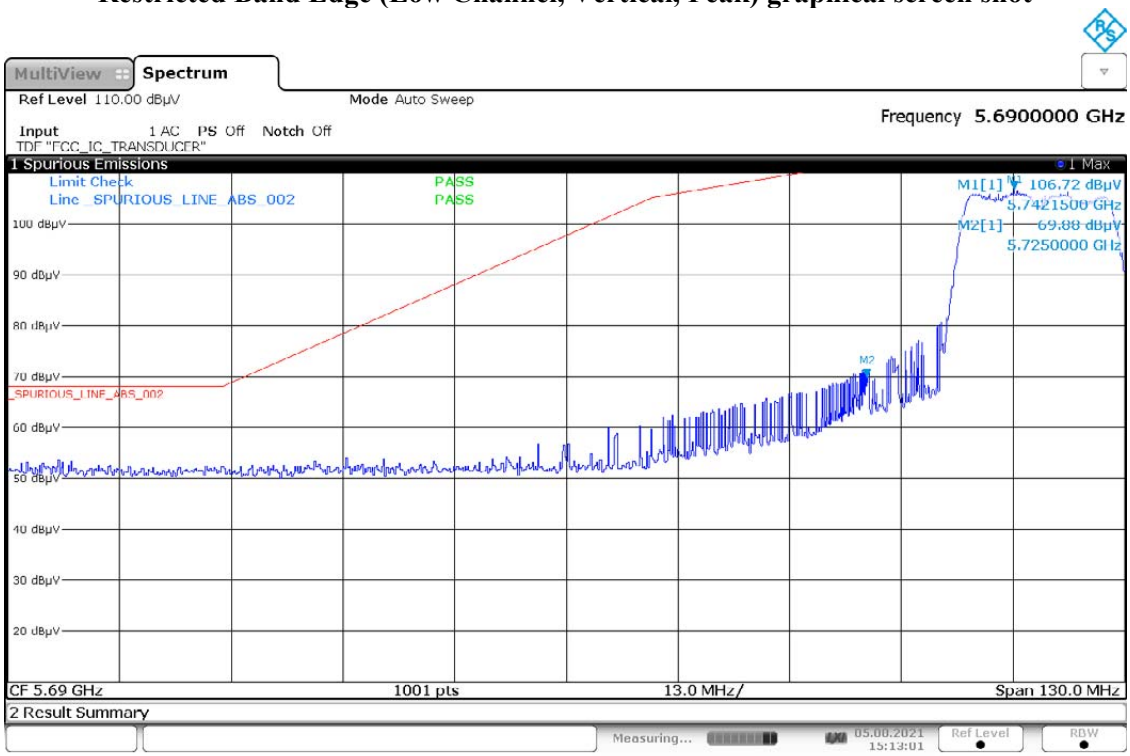
Restricted Band Edge (Low Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5725.0000	-	62.6582	-	-	68.2000	-	-	-5.5418	-	-
Horizontal Radiated Emission Result										
5725.0000	-	58.6570	-	-	68.2000	-	-	-9.5430	-	-

Remarks: Pass Result	Marginal Result	Fail Result

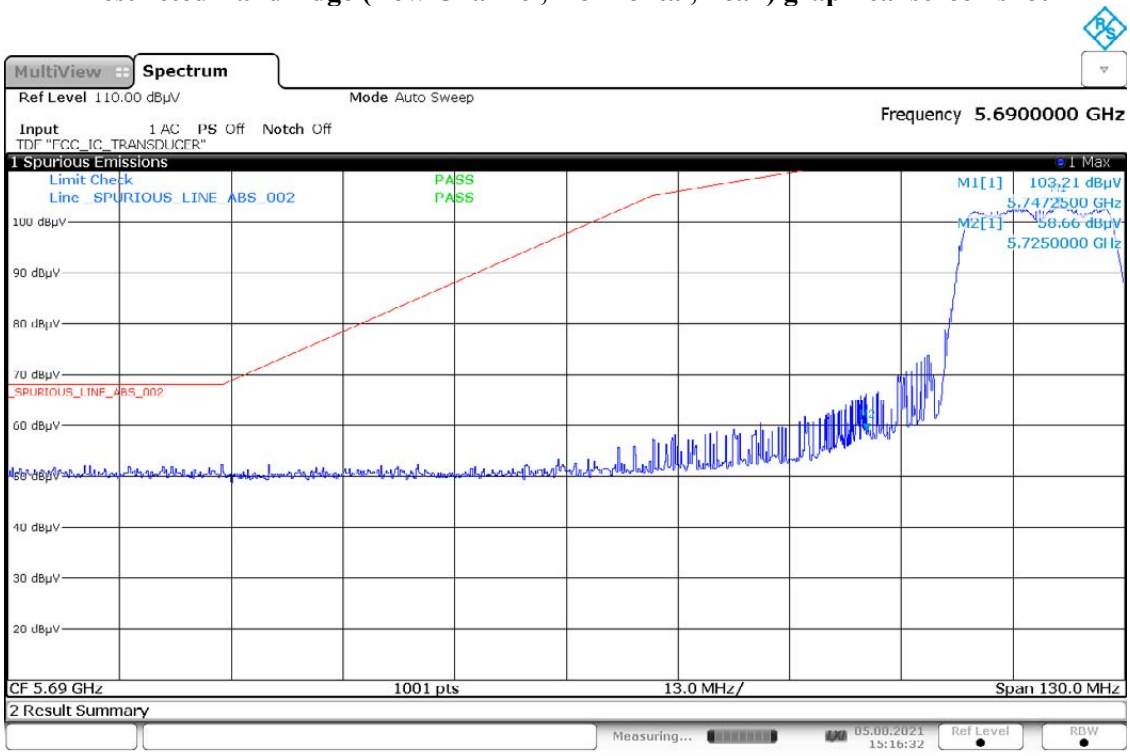
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Thu, 5 Aug, 2021**
System MU: 4.03dB

Restricted Band Edge (Low Channel, Vertical, Peak) graphical screen shot



15:13:01 05.08.2021

Restricted Band Edge (Low Channel, Horizontal, Peak) graphical screen shot



15:16:33 05.08.2021

Test: WIFI SAC Restricted Band Edge
Model Number: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: High Test Frequency: 5825.0000 MHz Test Standards: ANSI C63.10-2013 Worst Case Plane: X-Plane (802.11n 20MHz)

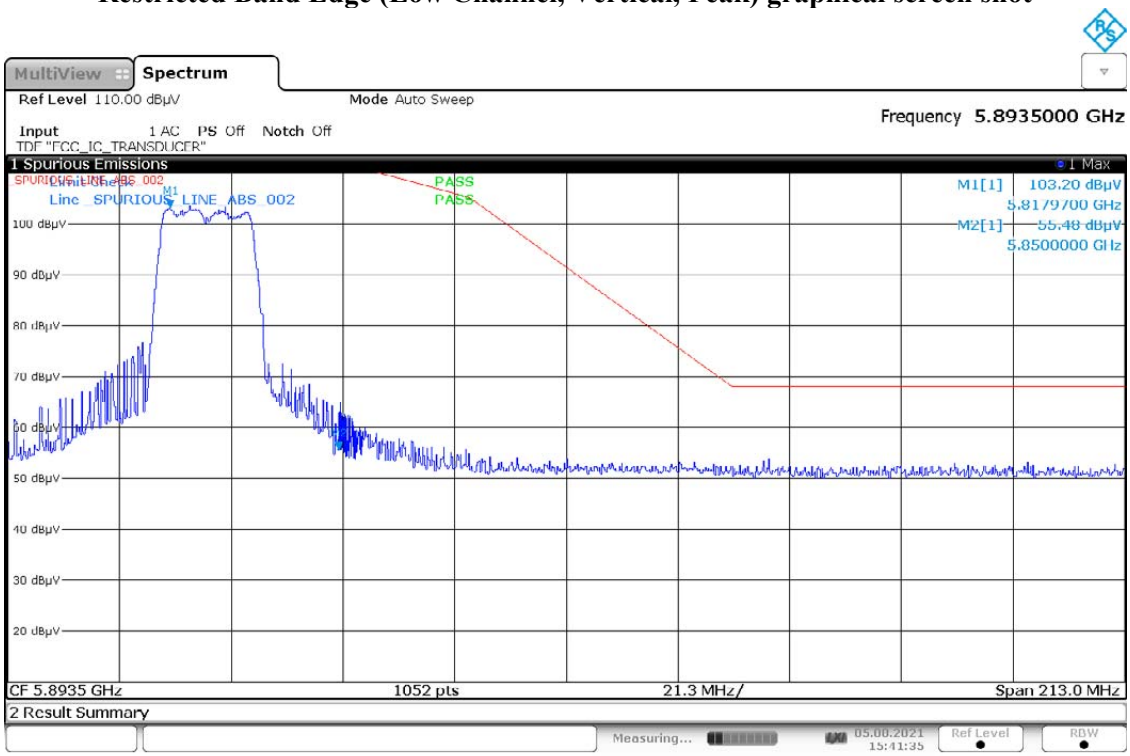
Restricted Band Edge (High Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5850.0000	-	55.4799	-	-	68.2000	-	-	-12.7201	-	-
Horizontal Radiated Emission Result										
5850.0000	-	57.4103	-	-	68.2000	-	-	-10.7897	-	-

Remarks: Pass Result	Marginal Result	Fail Result

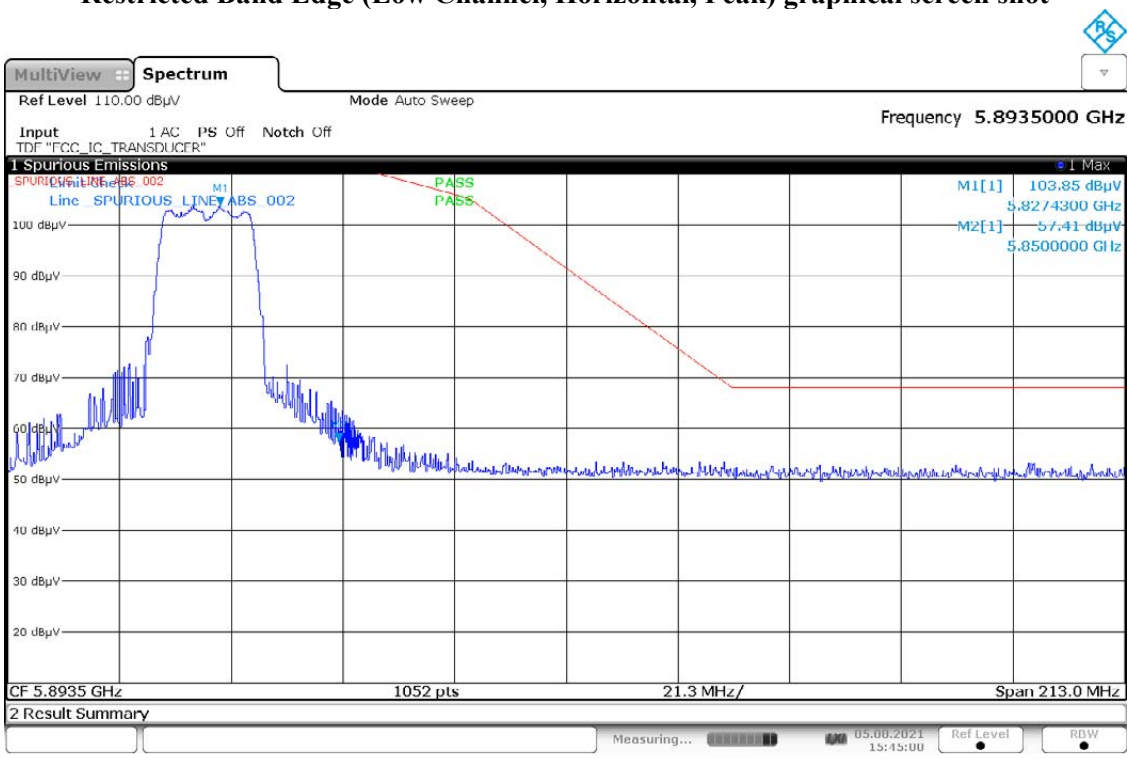
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Thu, 5 Aug, 2021**
System MU: 4.03dB

Restricted Band Edge (Low Channel, Vertical, Peak) graphical screen shot



15:41:35 05.08.2021

Restricted Band Edge (Low Channel, Horizontal, Peak) graphical screen shot

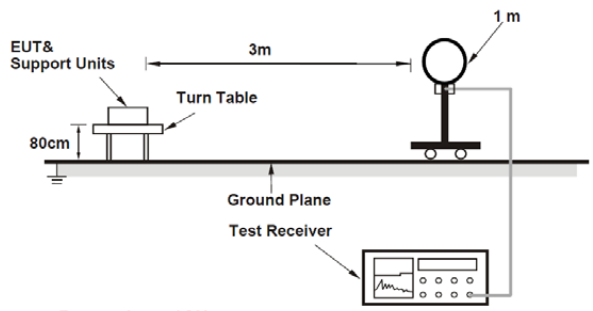


15:45:00 05.08.2021

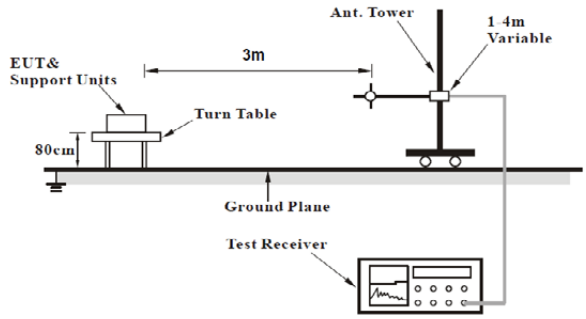
6.7. Radiated Spurious Emission Measurement

6.7.1. Test Setup

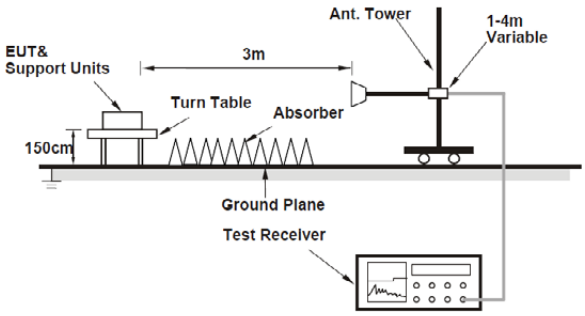
<Radiated emission below 30MHz>



<Frequency Range below 1GHz>



<Frequency Range above 1GHz>



1. The EUT is placed on the top of a rotating table 0.8m/1.5m above the ground at a 3m semi-anechoic chamber. The table is rotated 360 degrees to determine the position of the highest radiation.
2. The EUT is set 3m away from the interference-receiving antenna, which is mounted on the top of a variable-height antenna tower.
3. The antenna is Bilog/Horn antenna depend on which frequency range uses, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. For each suspected emission, the EUT is arranged to its worst case and then the antenna is tuned to heights from 1m to 4m and the rotatable table is turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system is set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. If the emission level of the EUT in peak mode is fall within the range of 10dB from the limit specified, the emissions would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. Otherwise, the testing could be stopped and the peak values of the EUT would be reported.

NOTE:

a. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection at frequency below 1GHz.
b. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and video bandwidth is 3 MHz for Peak detection at frequency above 1 GHz.
c. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz for Average detection using reduced video bandwidth (Duty cycle ≥98%) at frequency above 1GHz.
d. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 1/ τ Hz, where τ is minimum transmitter on time (Duty cycle <98%) for Average detection using reduced video bandwidth at frequency above 1GHz.
e. All modes of operation were investigated and the worst-case emissions are reported.

6.7.2. Test Limits

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table.

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

NOTE:

d. The lower limit shall apply at the transition frequencies.
e. Emission level (dBuV/m) = 20 log Emission level (uV/m).
f. For frequencies above 1000 MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

For Radiated emissions which fall out of the restricted bands must comply with the radiated emission limits specified as below table.

Applicable To		Limit	
789033 D02 General UNII Test Procedures New Rules v01r03		Field Strength at 3 m	
		PK: 74 (dBμV/m)	AV: 54 (dBμV/m)
Frequency Band	**Applicable To**	**EIRP Limit**	**Equivalent Field Strength at 3 m**
5150~5250 MHz	15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m)
5250~5350 MHz	15.407(b)(2)		
5470~5725 MHz	15.407(b)(3)		
5725~5850 MHz	15.407(b)(4)(i)	PK:-27 (dBm/MHz) *1 PK:10 (dBm/MHz) *2 PK:15.6 (dBm/MHz) *3 PK:27 (dBm/MHz) *4	PK: 68.2 (dBμV/m) *1 PK:105.2 (dBμV/m) *2 PK: 110.8 (dBμV/m) *3 PK:122.2 (dBμV/m) *4
	15.407(b)(4)(ii)	Emission limits in section 15.247(d)	

*1 beyond 75 MHz or more above of the band edge.
*2 below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.
*3 below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.
*4 from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

NOTE:

The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = ((1000000 \sqrt{(30P)}) / 3) \ \mu V/m$$, where P is the eirp (Watts)

6.7.3. Test Data

802.11a

Test: WIFI SAC Transmitter Radiated Emission
Model#: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: Low Test Frequency: 5180.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11a 20MHz)

Radiated Emission (Low Channel) tabular data

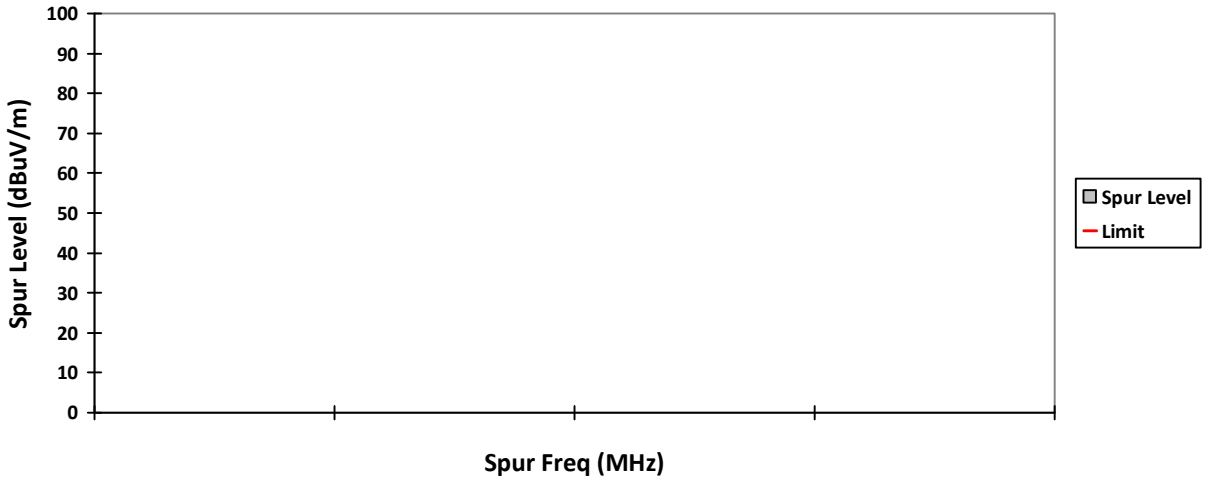
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10360	-	56.3849**	-	-	68.2	-	-	11.8151**	-	-
15540	-	58.3172**	37.91**	-	74.0	54.0	-	15.6828**	16.09**	-
20720	-	42.1105**	-	-	74.0	-	-	31.8895**	-	-
25900	-	42.4831**	-	-	68.2	-	-	25.7169**	-	-
31080	-	44.9382**	-	-	68.2	-	-	23.2618**	-	-
36260	-	48.4784**	-	-	68.2	-	-	19.7216**	-	-
Horizontal Radiated Emission Result										
10360	-	57.1343**	-	-	68.2	-	-	11.0657**	-	-
15540	-	57.6790**	38.22**	-	74.0	54.0	-	16.321**	15.78**	-
20720	-	41.2107**	-	-	74.0	-	-	32.7893**	-	-
25900	-	43.5353**	-	-	68.2	-	-	24.6647**	-	-
31080	-	45.6073**	-	-	68.2	-	-	22.5927**	-	-
36260	-	47.6129**	-	-	68.2	-	-	20.5871**	-	-

Remarks: Pass Result	Marginal Result	Fail Result

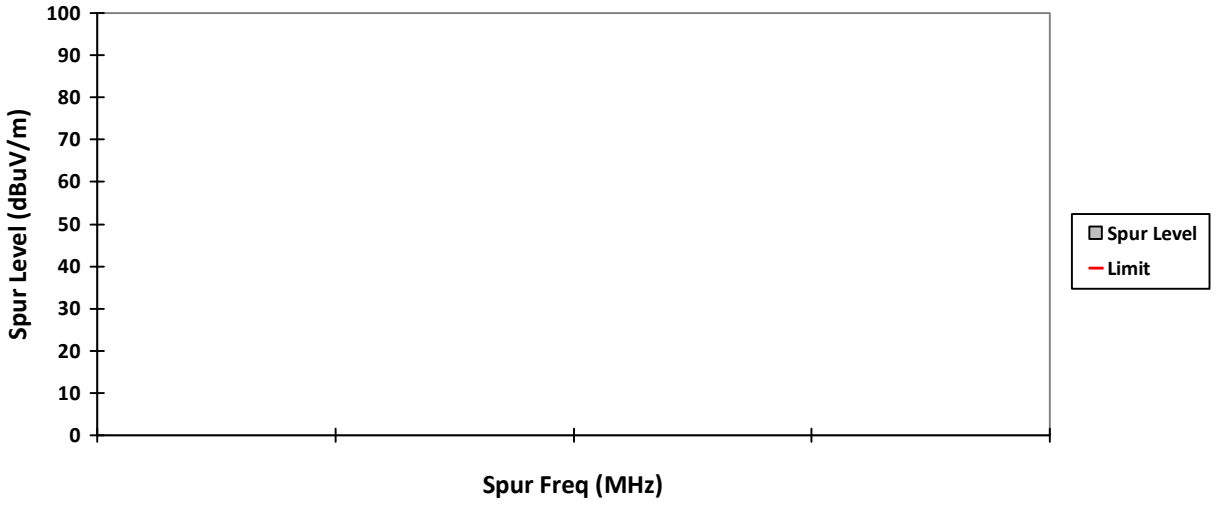
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Fri, 6 Aug, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

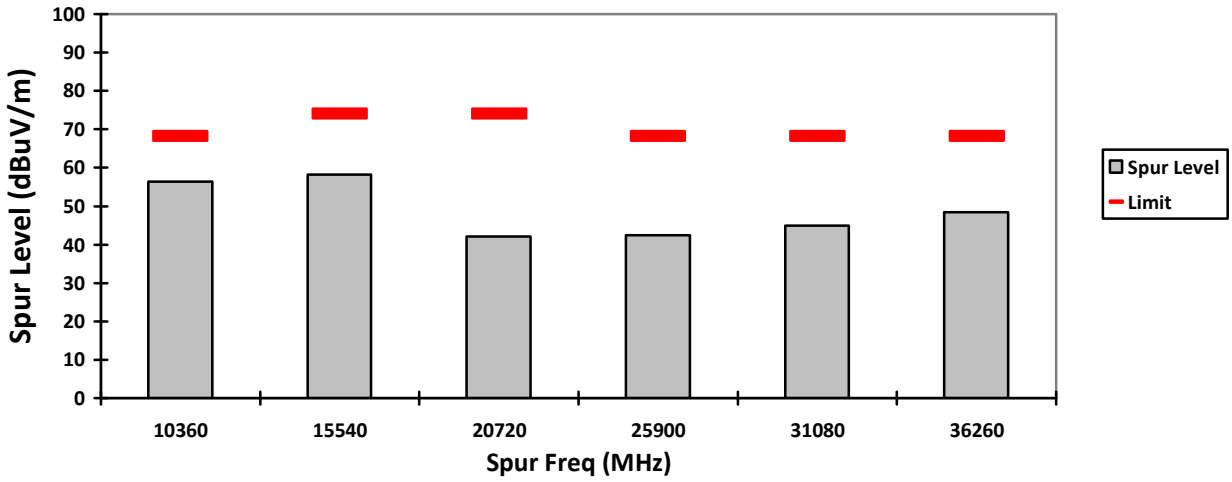
VERTICAL, QPK



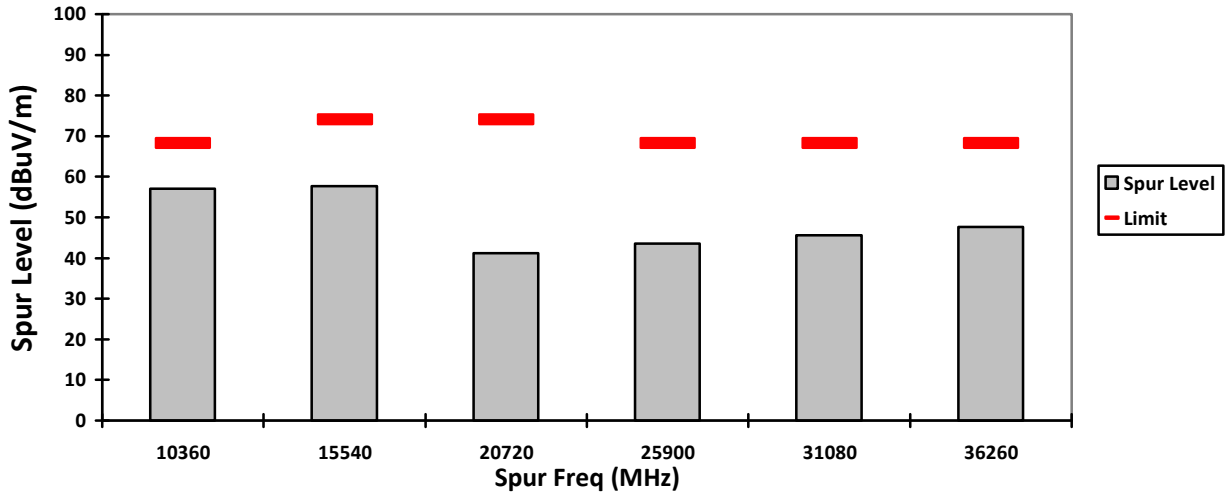
HORIZONTAL, QPK

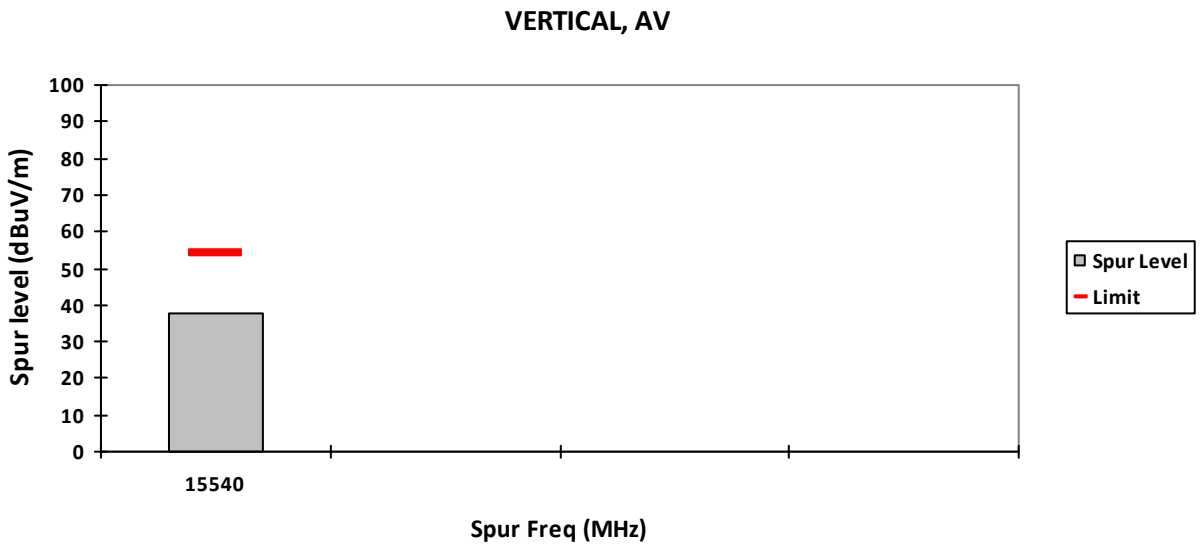


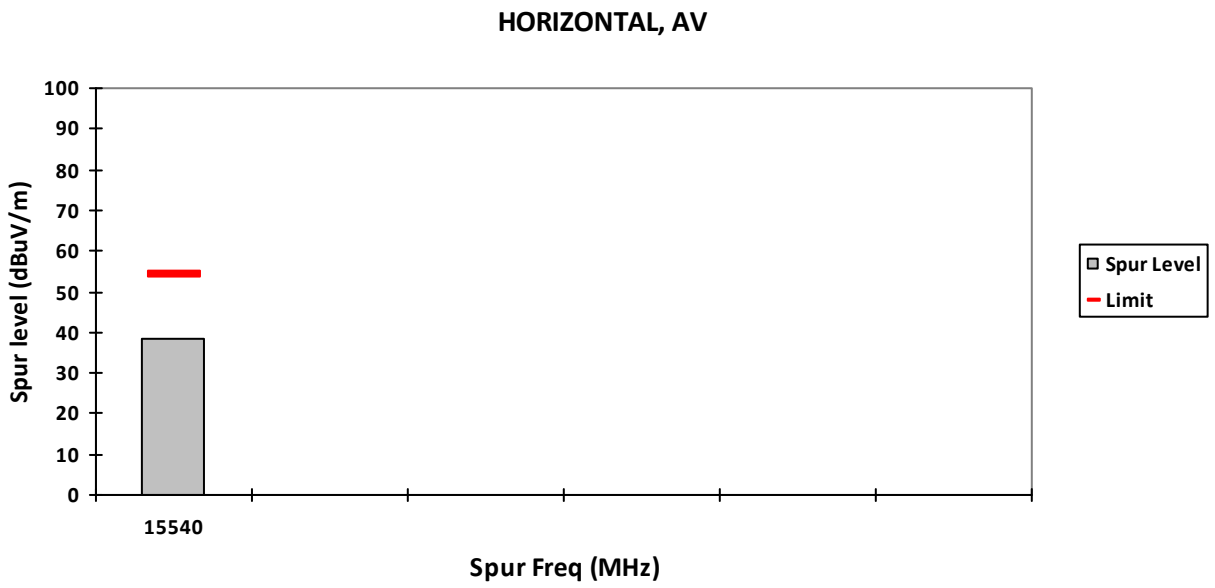
VERTICAL, PK



HORIZONTAL, PK




VERTICAL, AV
Spur level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
15540
Spur Freq (MHz)
Spur Level
Limit


HORIZONTAL, AV
Spur level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
15540
Spur Freq (MHz)
Spur Level
Limit

Test: WIFI SAC Transmitter Radiated Emission
Model#: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: Mid Test Frequency: 5220.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11a 20MHz)

Radiated Emission (Mid Channel) tabular data

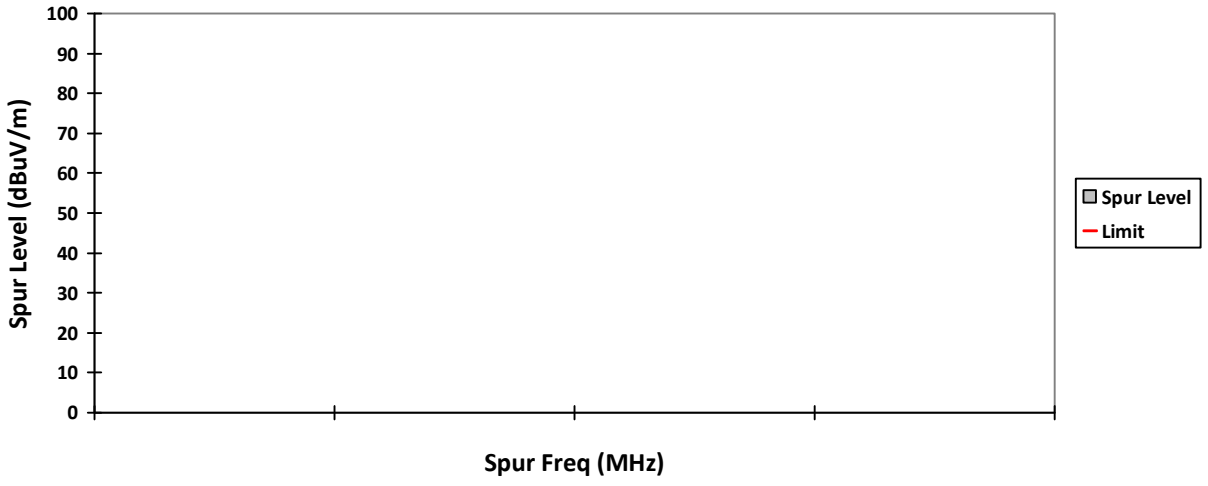
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10440	-	57.8420**	-	-	68.2	-	-	10.358 **	-	-
15660	-	58.6149**	38.12**	-	74.0	54.0	-	15.3851 **	15.88 **	-
20880	-	41.3790**	-	-	74.0	-	-	32.621 **	-	-
26100	-	43.2543**	-	-	68.2	-	-	24.9457 **	-	-
31320	-	46.3290**	-	-	74.0	-	-	27.671 **	-	-
36540	-	49.1999**	-	-	74.0	-	-	24.8001 **	-	-
Horizontal Radiated Emission Result										
10440	-	59.9530**	-	-	68.2	-	-	8.247 **	-	-
15660	-	61.1184**	37.56**	-	74.0	54.0	-	12.8816 **	16.44 **	-
20880	-	41.8723**	-	-	74.0	-	-	32.1277 **	-	-
26100	-	44.6426**	-	-	68.2	-	-	23.5574 **	-	-
31320	-	45.1943**	-	-	74.0	-	-	28.8057 **	-	-
36540	-	48.1553**	-	-	74.0	-	-	25.8447 **	-	-

Remarks: Pass Result	Marginal Result	Fail Result

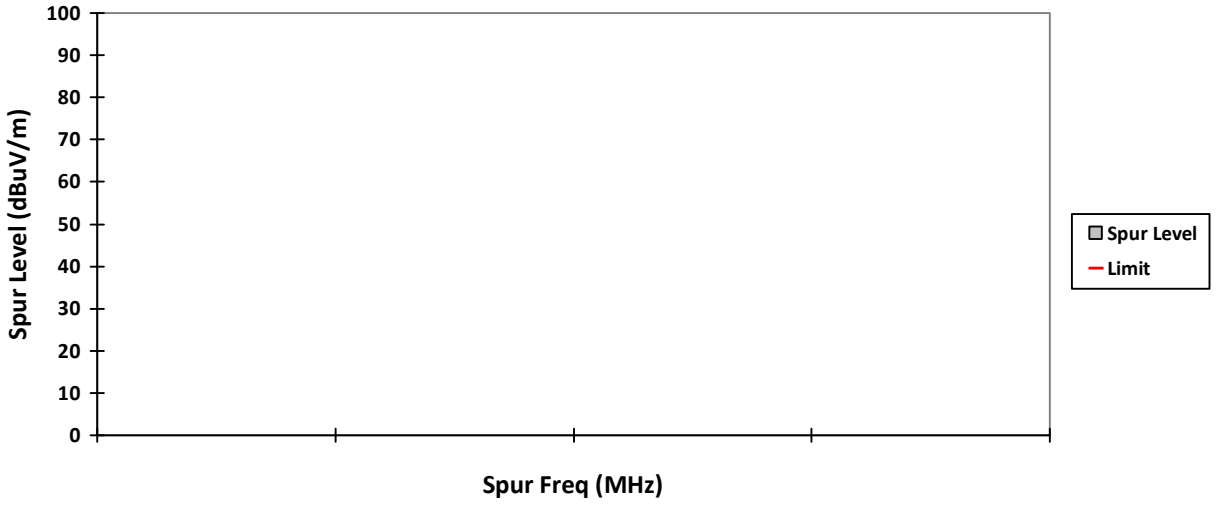
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Fri, 6 Aug, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

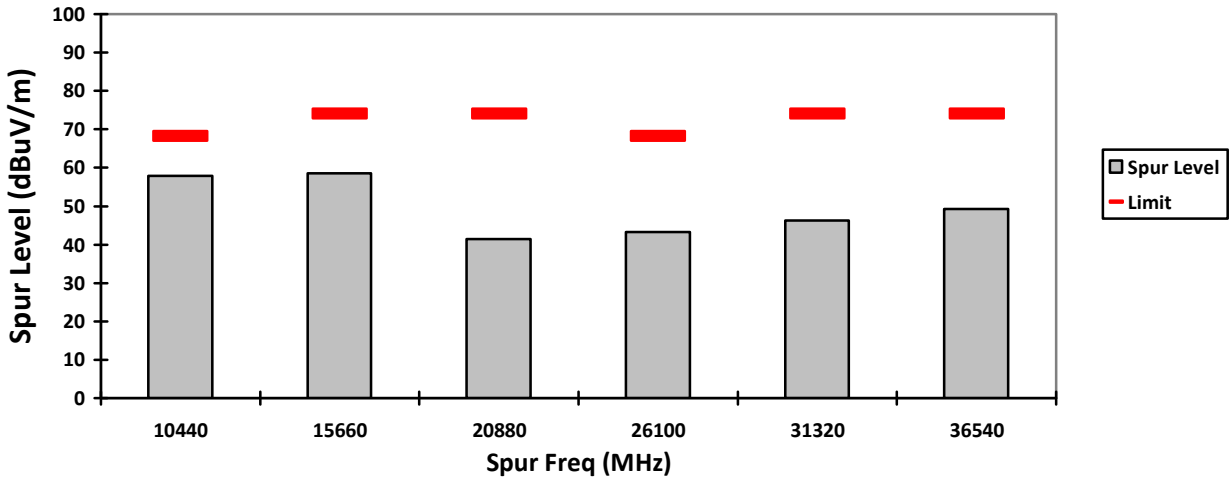
VERTICAL, QPK



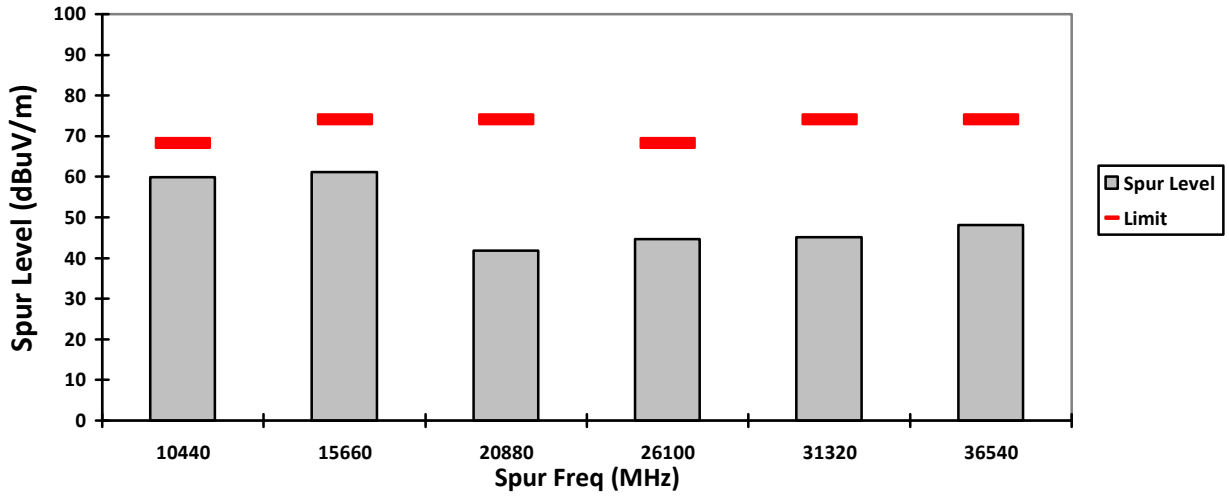
HORIZONTAL, QPK



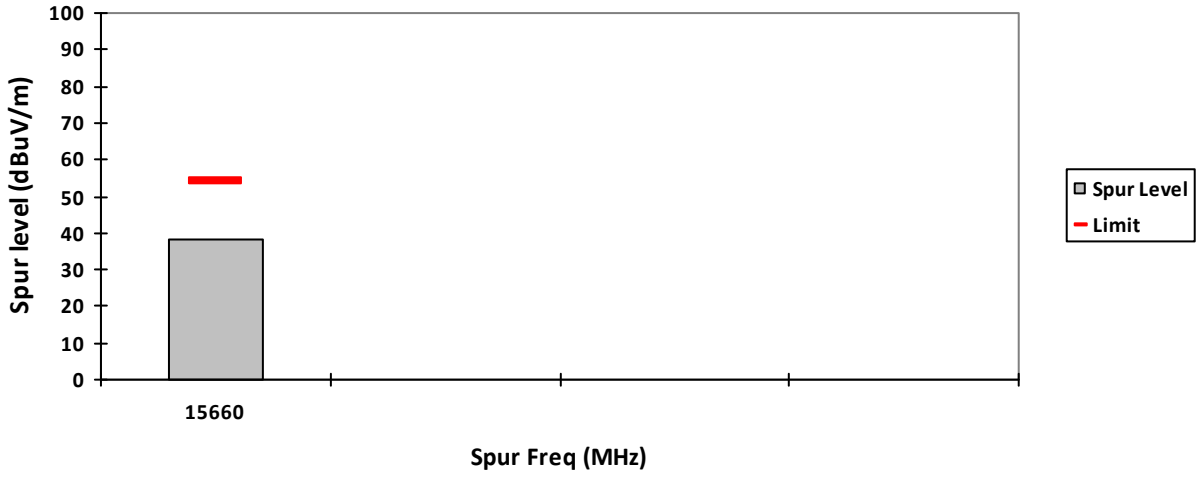
VERTICAL, PK



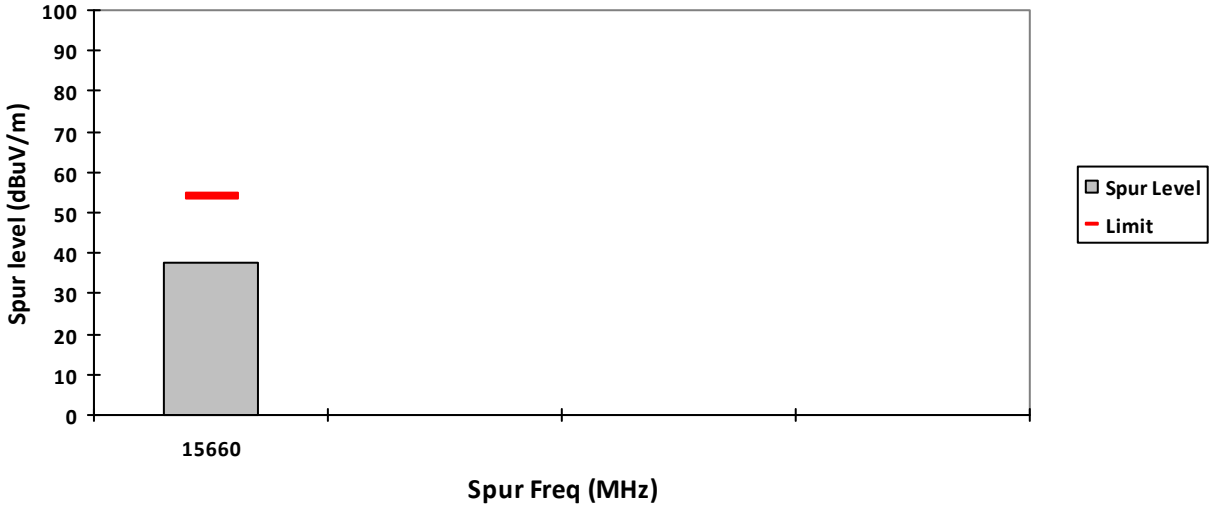
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: High Test Frequency: 5240.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11a 20MHz)

Radiated Emission (High Channel) tabular data

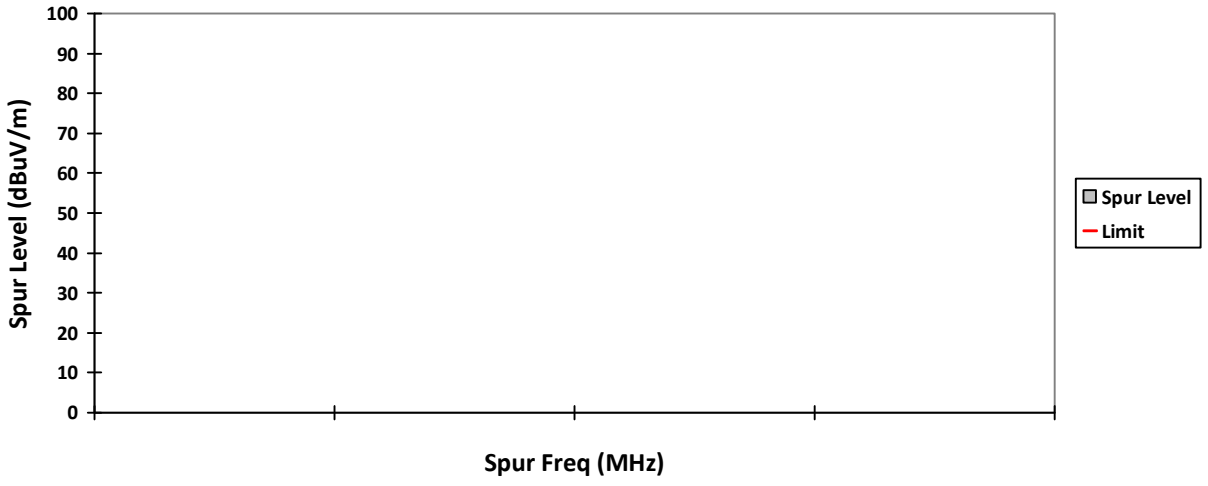
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10480	-	56.3085**	-	-	68.2	-	-	11.8915 **	-	-
15720	-	60.1276**	37.9**	-	74.0	54.0	-	13.8724 **	16.1 **	-
20960	-	41.4105**	-	-	74.0	-	-	32.5895 **	-	-
26200	-	46.2694**	-	-	68.2	-	-	21.9306 **	-	-
31440	-	46.1183**	-	-	74.0	-	-	27.8817 **	-	-
36680	-	49.3761**	-	-	68.2	-	-	18.8239 **	-	-
Horizontal Radiated Emission Result										
10480	-	56.9899**	-	-	68.2	-	-	11.2101 **	-	-
15720	-	58.7001**	37.94**	-	74.0	54.0	-	15.2999 **	16.06 **	-
20960	-	42.1005**	-	-	74.0	-	-	31.8995 **	-	-
26200	-	45.9181**	-	-	68.2	-	-	22.2819 **	-	-
31440	-	46.7656**	-	-	74.0	-	-	27.2344 **	-	-
36680	-	48.3899**	-	-	68.2	-	-	19.8101 **	-	-

Remarks: Pass Result	Marginal Result	Fail Result

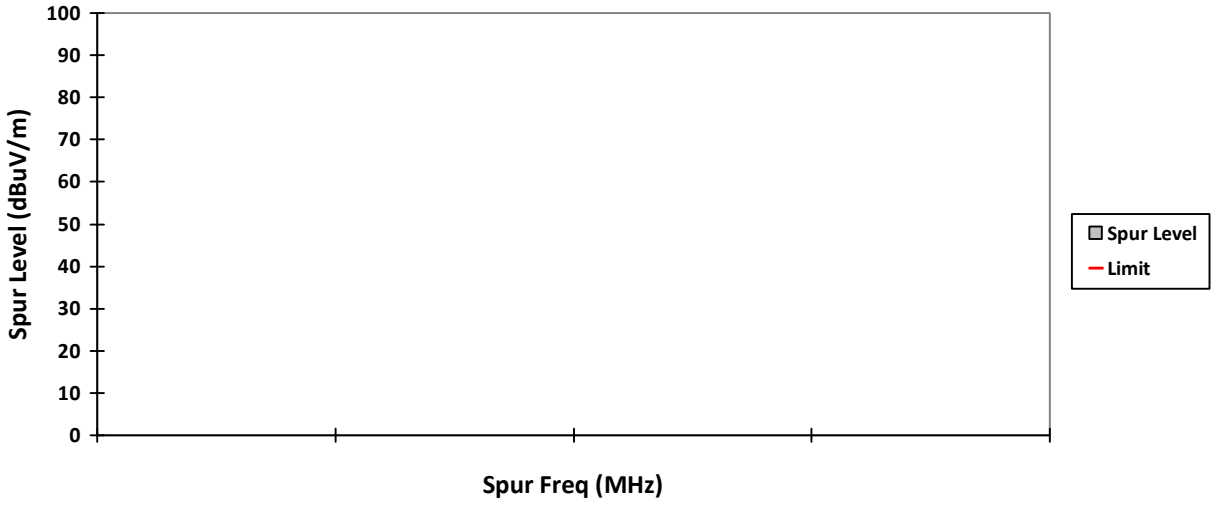
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Fri, 6 Aug, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

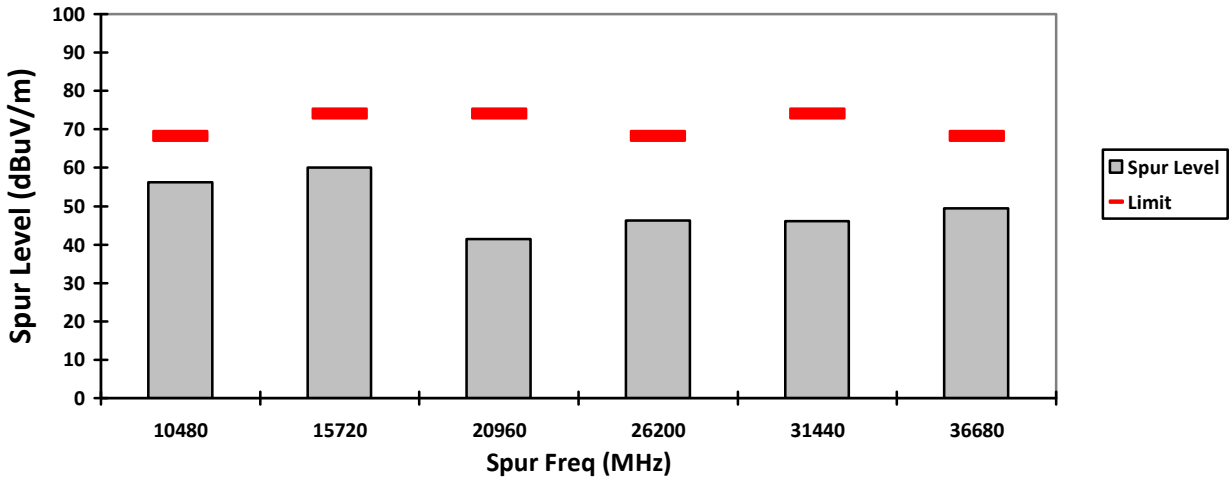
VERTICAL, QPK



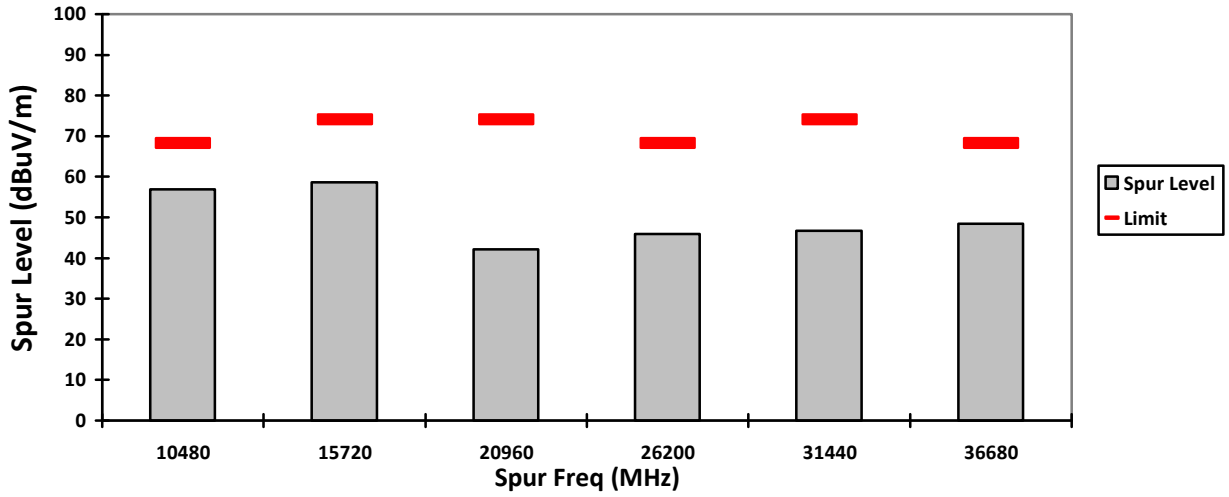
HORIZONTAL, QPK



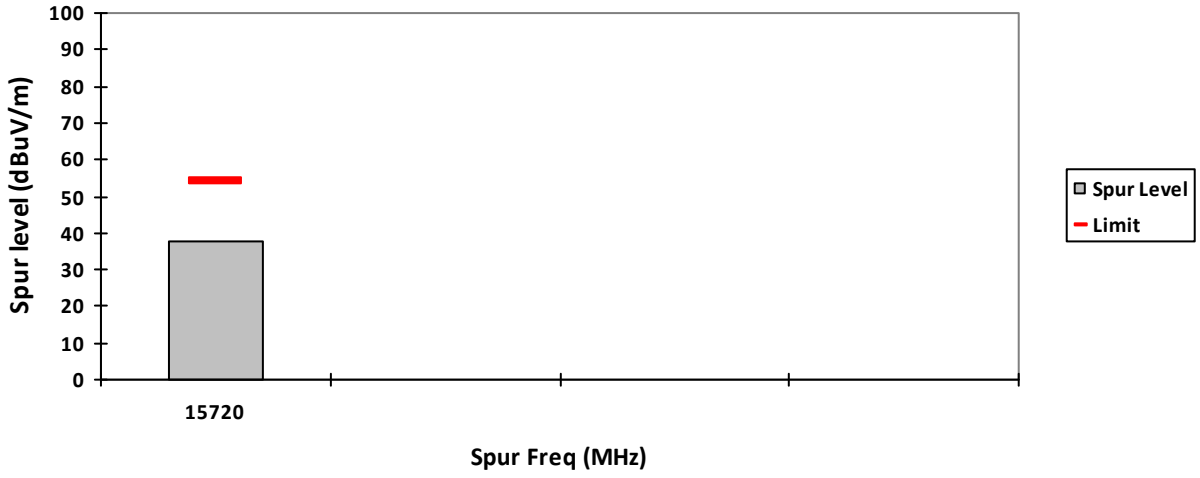
VERTICAL, PK



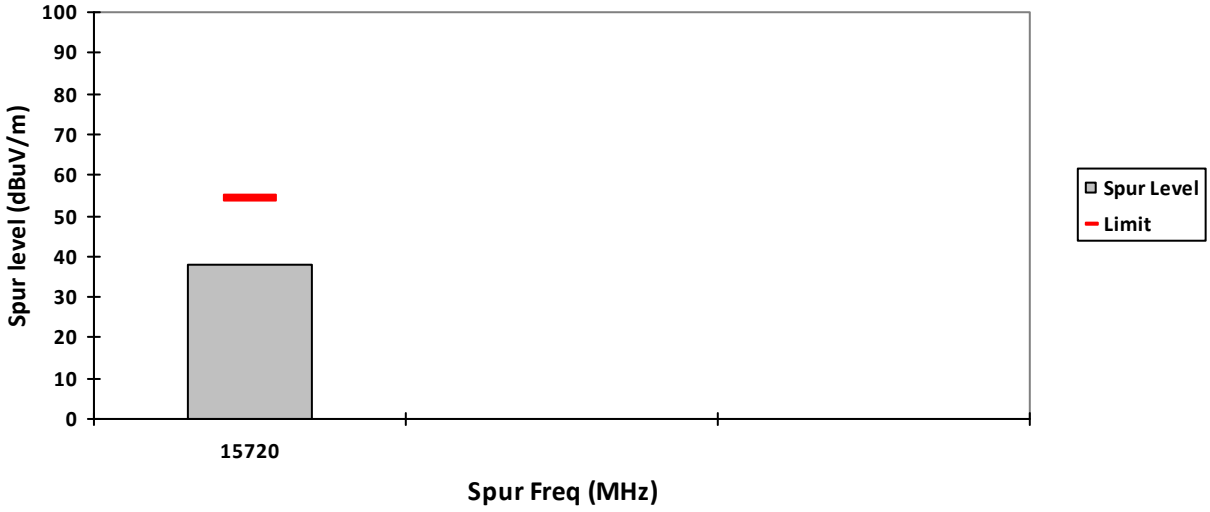
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: Low Test Frequency: 5260.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11a 20MHz)

Radiated Emission (Low Channel) tabular data

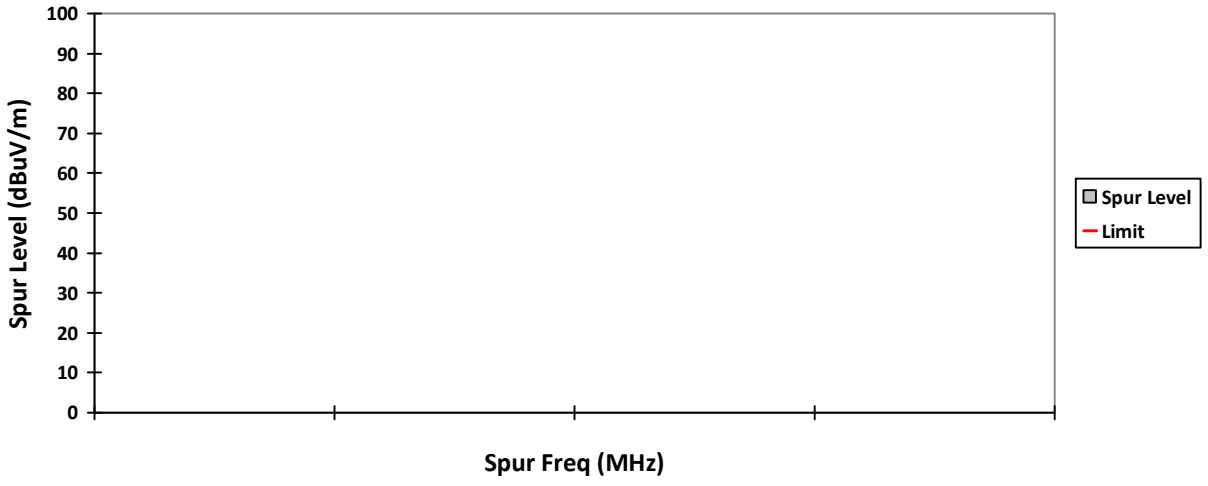
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10520	-	58.1967**	-	-	68.2	-	-	10.0033 **	-	-
15780	-	60.7696**	38.5**	-	74.0	54.0	-	13.2304 **	15.5 **	-
21040	-	39.9717**	-	-	74.0	-	-	34.0283 **	-	-
26300	-	45.5238**	-	-	68.2	-	-	22.6762 **	-	-
31560	-	46.5768**	-	-	74.0	-	-	27.4232 **	-	-
36820	-	48.4972**	-	-	68.2	-	-	19.7028 **	-	-
Horizontal Radiated Emission Result										
10520	-	59.7526**	-	-	68.2	-	-	8.4474 **	-	-
15780	-	59.9130**	38.1**	-	74.0	54.0	-	14.087 **	15.9 **	-
21040	-	40.5659**	-	-	74.0	-	-	33.4341 **	-	-
26300	-	44.2884**	-	-	68.2	-	-	23.9116 **	-	-
31560	-	46.0348**	-	-	74.0	-	-	27.9652 **	-	-
36820	-	48.1980**	-	-	68.2	-	-	20.002 **	-	-

Remarks: Pass Result	Marginal Result	Fail Result

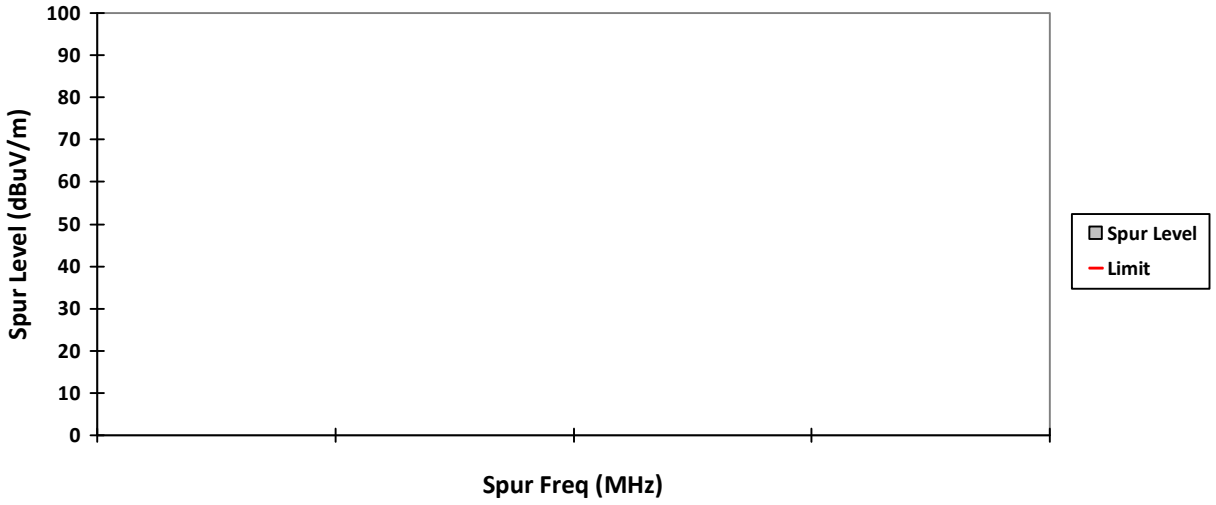
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Fri, 6 Aug, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

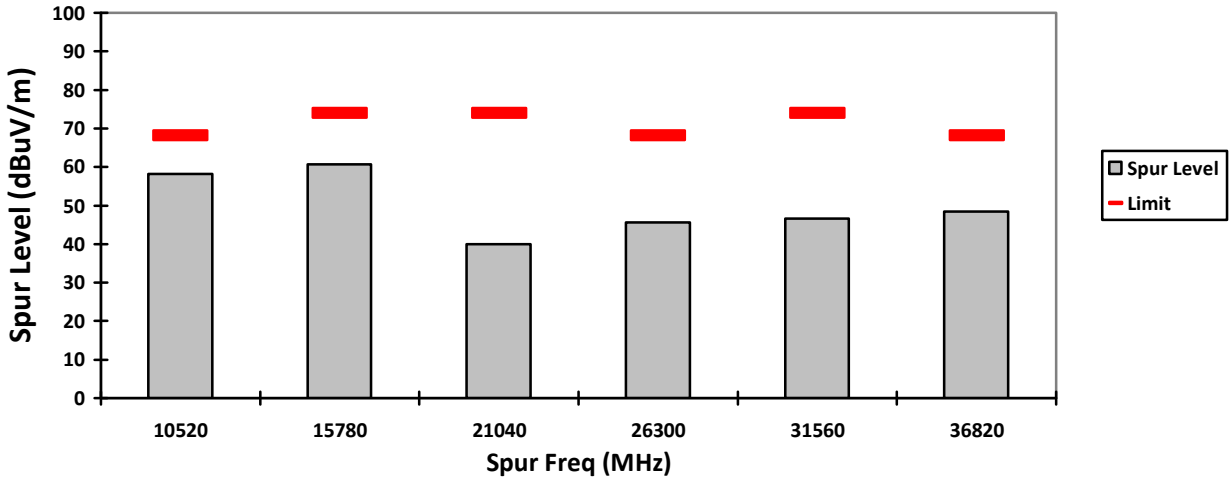
VERTICAL, QPK



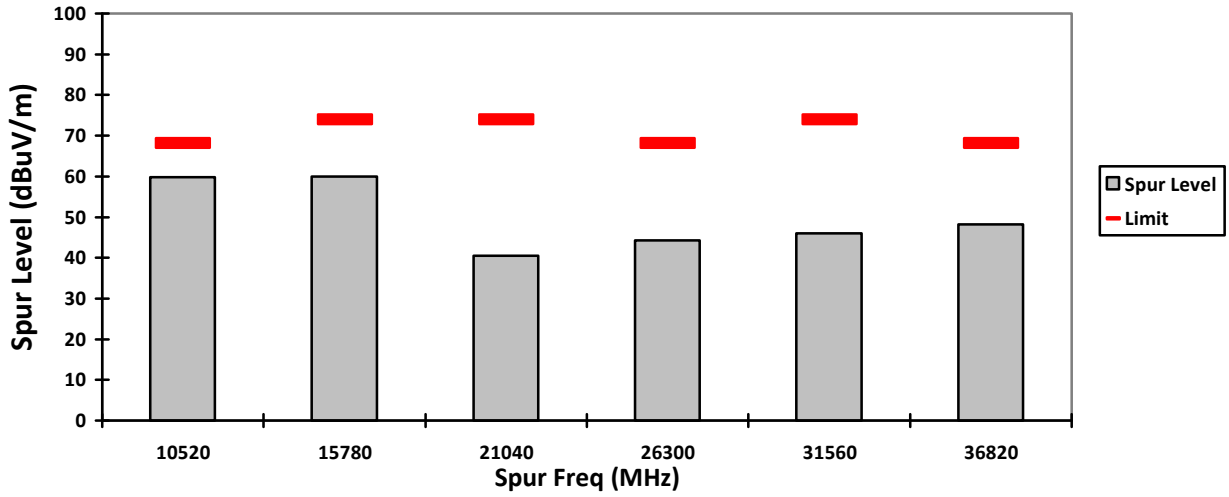
HORIZONTAL, QPK



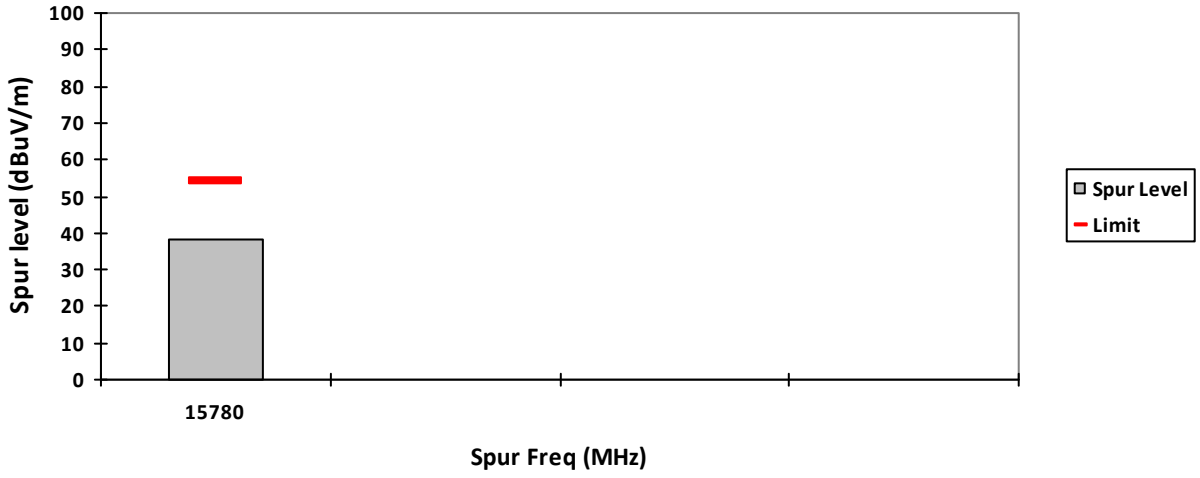
VERTICAL, PK



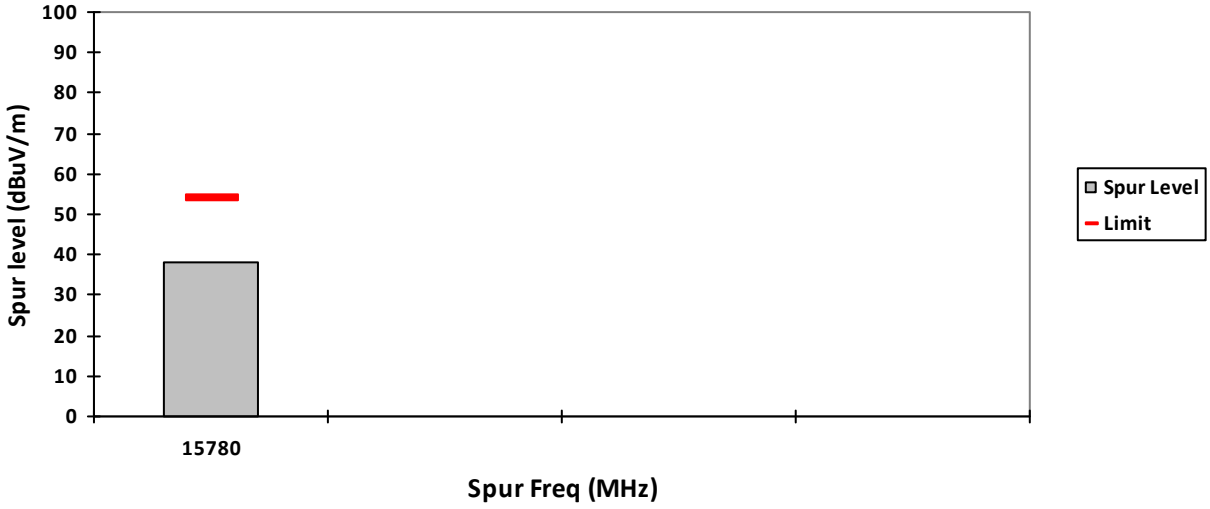
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: Mid Test Frequency: 5300.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11a 20MHz)

Radiated Emission (Mid Channel) tabular data

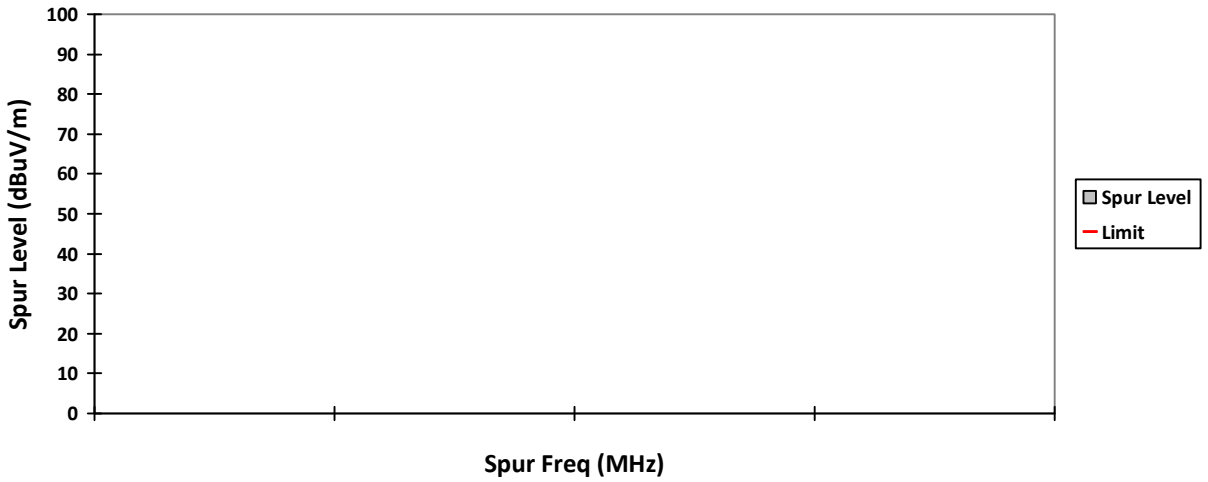
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10600	-	58.5247**	35.14**	-	74.0	54.0	-	15.4753 **	18.86 **	-
15900	-	61.1598**	38.45**	-	74.0	54.0	-	12.8402 **	15.55 **	-
21200	-	42.3991**	-	-	74.0	-	-	31.6009 **	-	-
26500	-	45.6413**	-	-	68.2	-	-	22.5587 **	-	-
31800	-	46.0977**	-	-	74.0	-	-	27.9023 **	-	-
37100	-	48.9931**	-	-	68.2	-	-	19.2069 **	-	-
Horizontal Radiated Emission Result										
10600	-	58.2972**	35.59**	-	74.0	54.0	-	15.7028 **	18.41 **	-
15900	-	60.7124**	38.72**	-	74.0	54.0	-	13.2876 **	15.28 **	-
21200	-	42.9433**	-	-	74.0	-	-	31.0567 **	-	-
26500	-	44.4673**	-	-	68.2	-	-	23.7327 **	-	-
31800	-	45.1450**	-	-	74.0	-	-	28.855 **	-	-
37100	-	48.8149**	-	-	68.2	-	-	19.3851 **	-	-

Remarks: Pass Result	Marginal Result	Fail Result

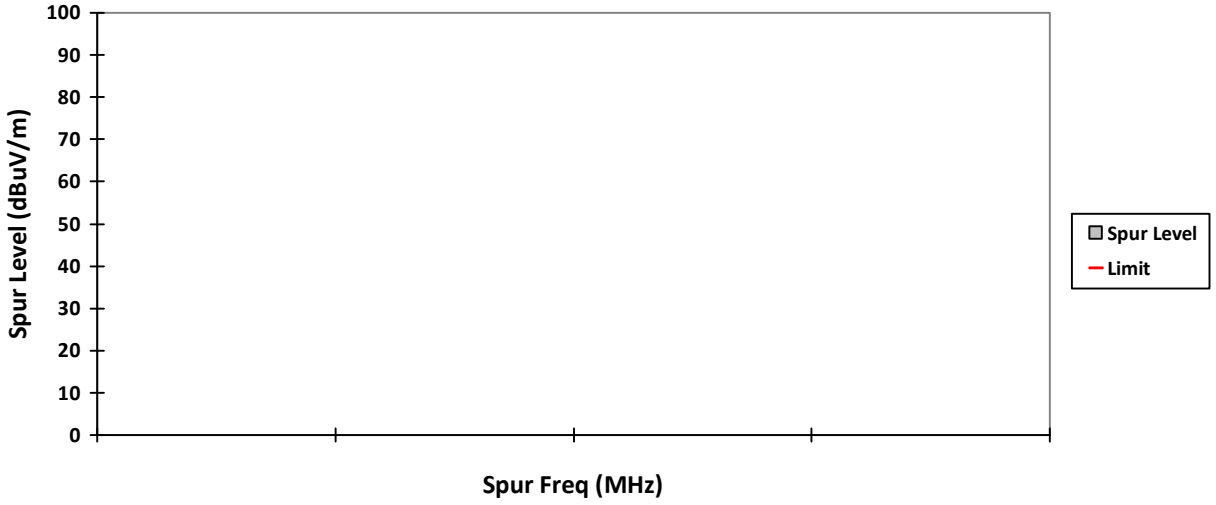
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Fri, 6 Aug, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

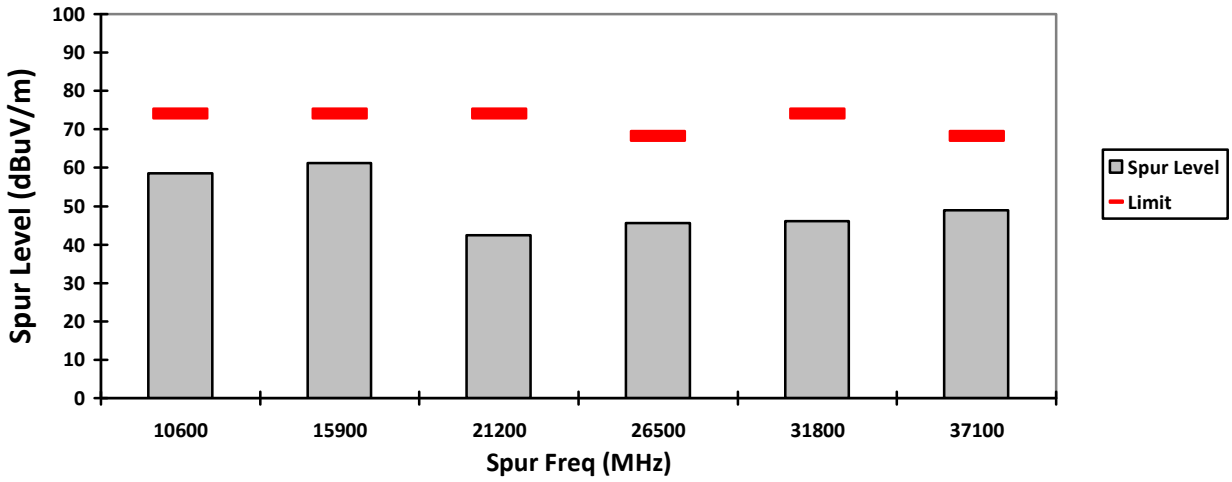
VERTICAL, QPK



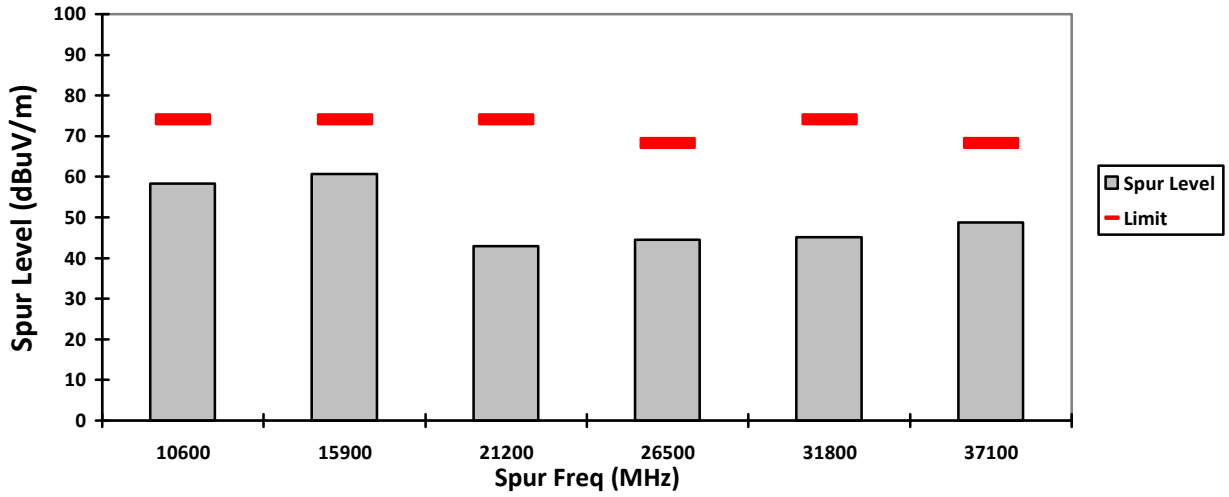
HORIZONTAL, QPK

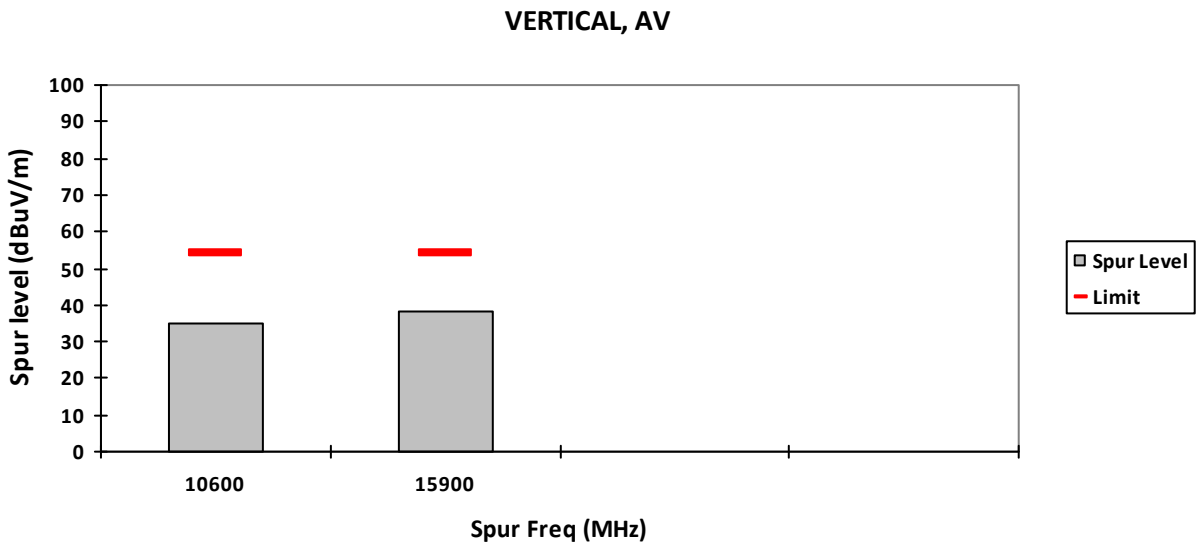


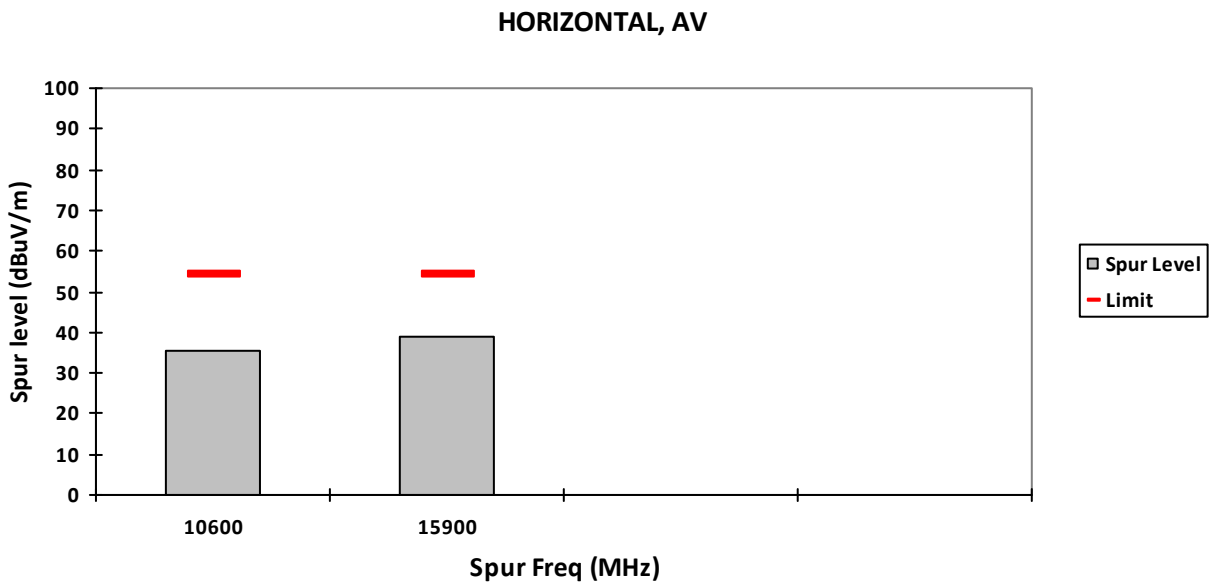
VERTICAL, PK



HORIZONTAL, PK




VERTICAL, AV
Spur level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
10600
15900
Spur Freq (MHz)
Spur Level
Limit


HORIZONTAL, AV
Spur level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
10600
15900
Spur Freq (MHz)
Spur Level
Limit

Test: WIFI SAC Transmitter Radiated Emission
Model#: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: High Test Frequency: 5320.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11a 20MHz)

Radiated Emission (High Channel) tabular data

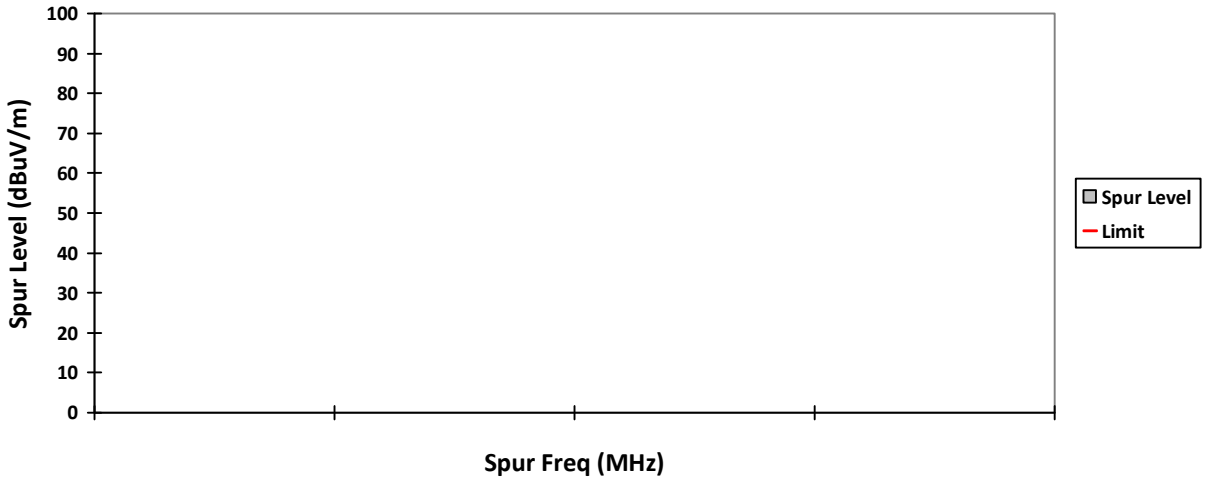
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10640	-	55.5640**	35.12**	-	74.0	54.0	-	18.436 **	18.88 **	-
15960	-	57.8208**	38.16**	-	74.0	54.0	-	16.1792 **	15.84 **	-
21280	-	42.9574**	-	-	74.0	-	-	31.0426 **	-	-
26600	-	43.2665**	-	-	68.2	-	-	24.9335 **	-	-
31920	-	46.8420**	-	-	68.2	-	-	21.358 **	-	-
37240	-	48.1535**	-	-	68.2	-	-	20.0465 **	-	-
Horizontal Radiated Emission Result										
10640	-	55.9142**	35.47**	-	74.0	54.0	-	18.0858 **	18.53 **	-
15960	-	57.8553**	38.51**	-	74.0	54.0	-	16.1447 **	15.49 **	-
21280	-	43.0499**	-	-	74.0	-	-	30.9501 **	-	-
26600	-	43.0352**	-	-	68.2	-	-	25.1648 **	-	-
31920	-	46.0724**	-	-	68.2	-	-	22.1276 **	-	-
37240	-	48.8988**	-	-	68.2	-	-	19.3012 **	-	-

Remarks: Pass Result	Marginal Result	Fail Result

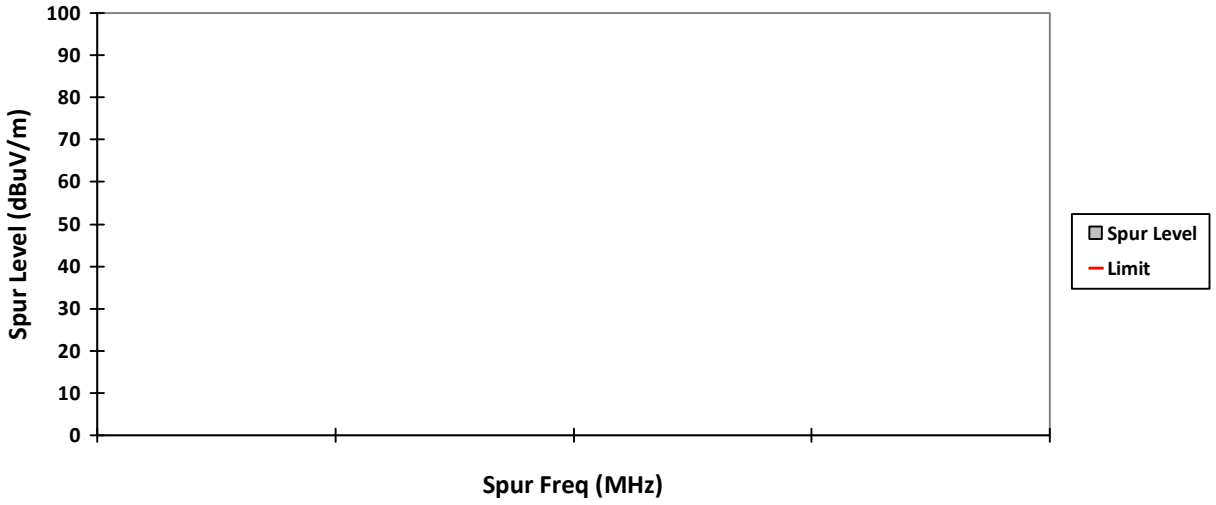
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Fri, 6 Aug, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

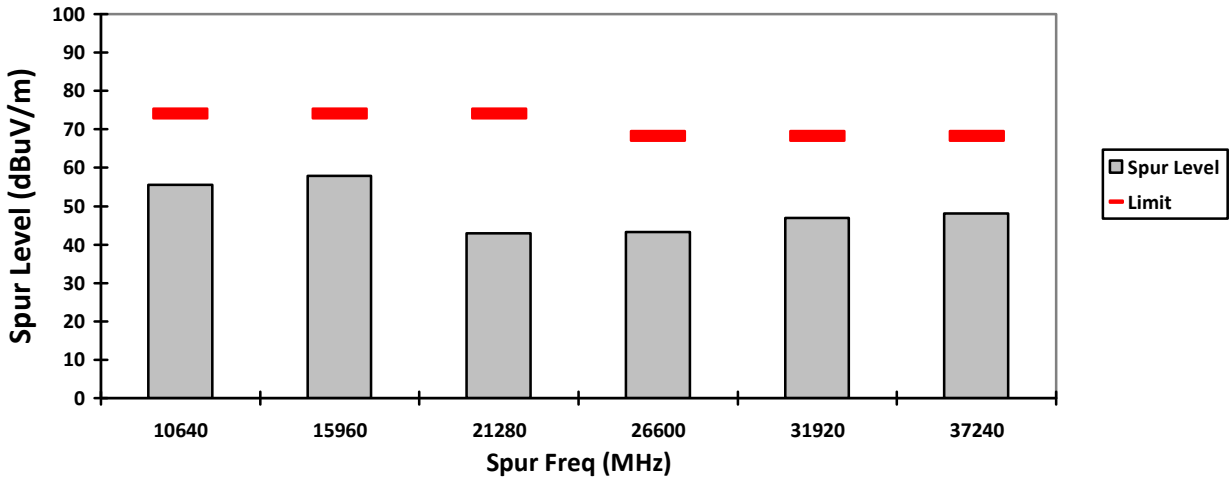
VERTICAL, QPK



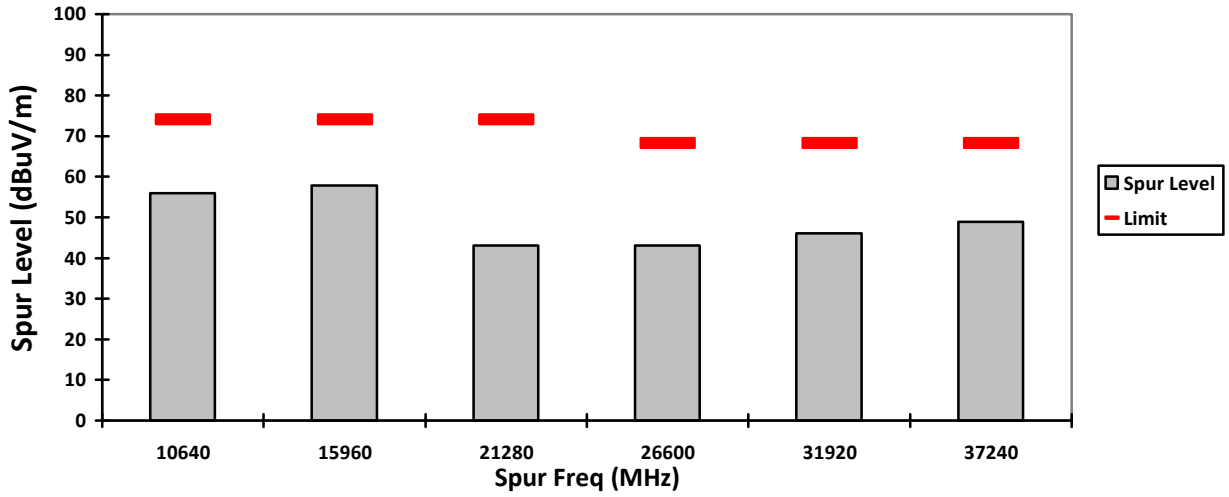
HORIZONTAL, QPK

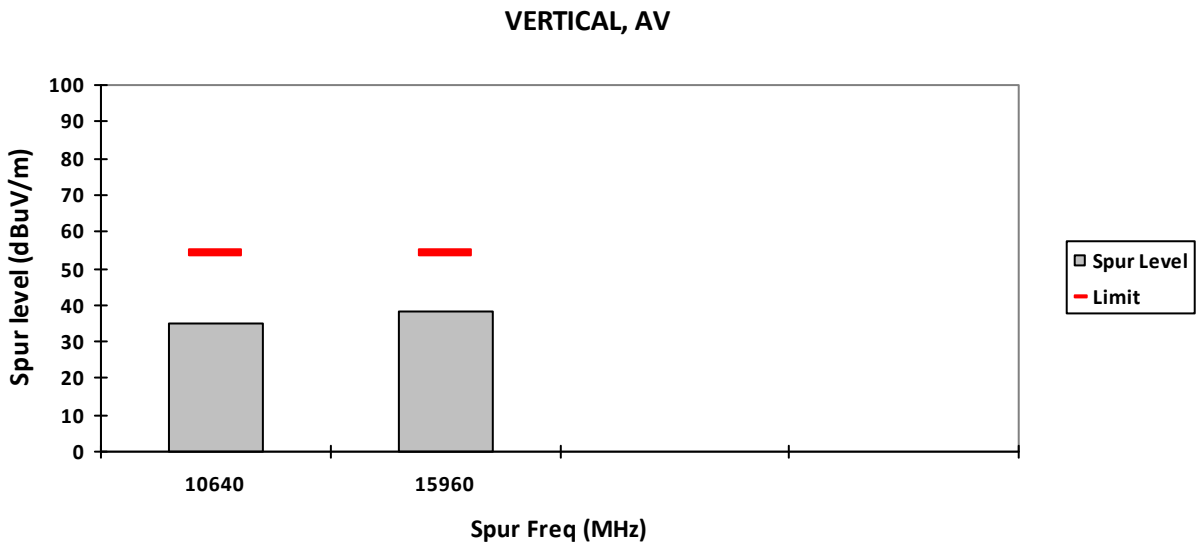


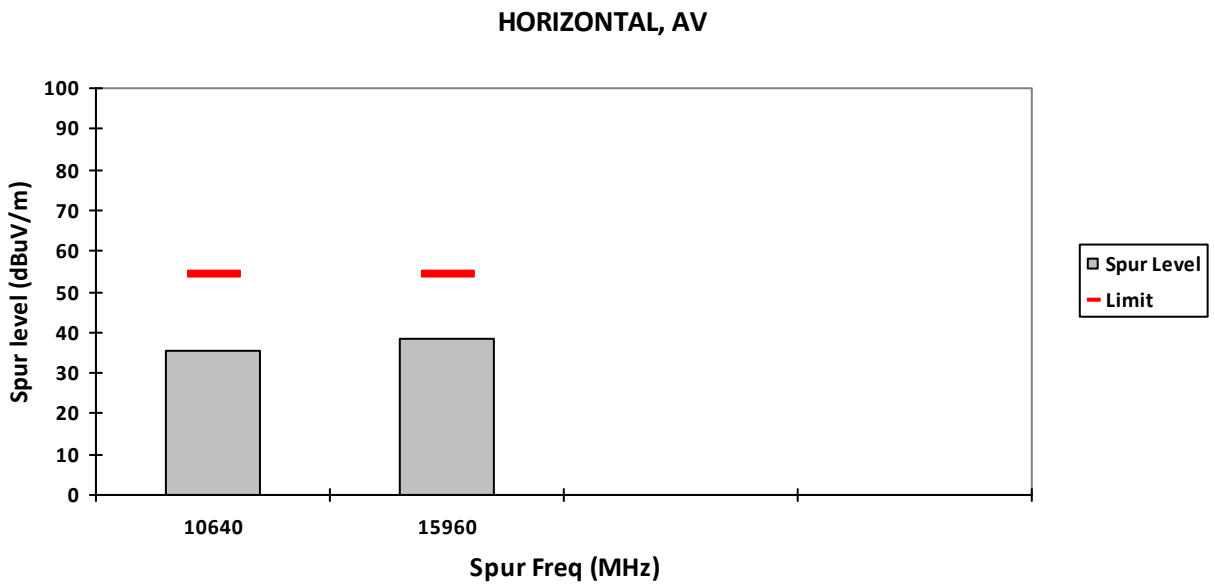
VERTICAL, PK



HORIZONTAL, PK




VERTICAL, AV
Spur level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
10640
15960
Spur Freq (MHz)
Spur Level
Limit


HORIZONTAL, AV
Spur level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
10640
15960
Spur Freq (MHz)
Spur Level
Limit

Test: WIFI SAC Transmitter Radiated Emission
Model#: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: Low Test Frequency: 5500.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11a 20MHz)

Radiated Emission (Low Channel) tabular data

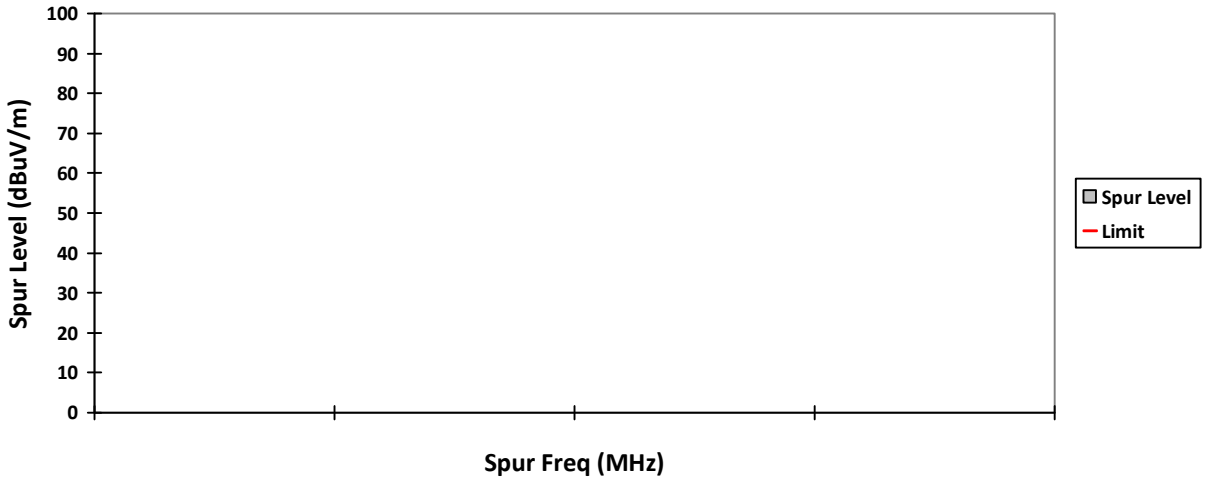
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11000	-	57.3937**	36.54**	-	74.0	54.0	-	16.6063 **	17.46 **	-
16500	-	63.7146**	-	-	68.2	-	-	4.4854 **	-	-
22000	-	43.7091**	-	-	74.0	-	-	30.2909 **	-	-
27500	-	44.3701**	-	-	68.2	-	-	23.8299 **	-	-
33000	-	44.9270**	-	-	68.2	-	-	23.273 **	-	-
38500	-	49.2024**	-	-	68.2	-	-	18.9976 **	-	-
Horizontal Radiated Emission Result										
11000	-	57.0549**	36.01**	-	74.0	54.0	-	16.9451 **	17.99 **	-
16500	-	64.9573**	-	-	68.2	-	-	3.2427 **	-	-
22000	-	44.1418**	-	-	74.0	-	-	29.8582 **	-	-
27500	-	43.7876**	-	-	68.2	-	-	24.4124 **	-	-
33000	-	45.8554**	-	-	68.2	-	-	22.3446 **	-	-
38500	-	49.4352**	-	-	68.2	-	-	18.7648 **	-	-

Remarks: Pass Result	Marginal Result	Fail Result

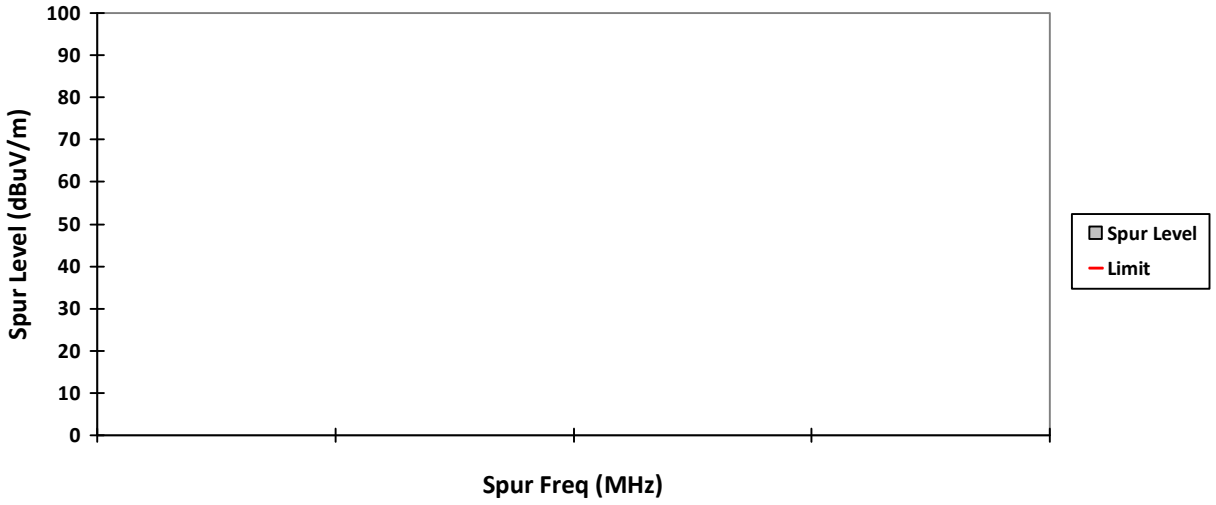
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Fri, 6 Aug, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

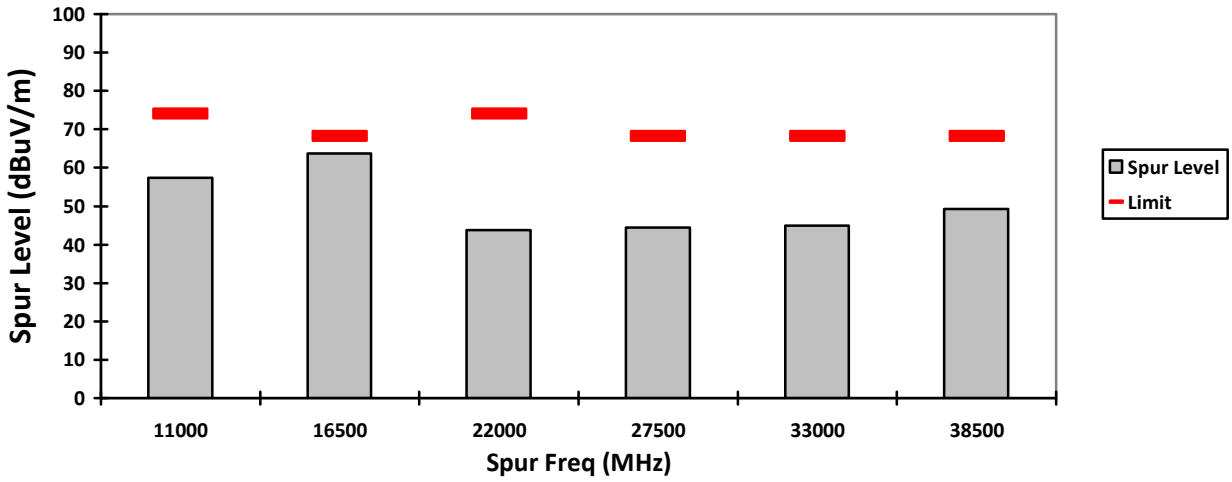
VERTICAL, QPK



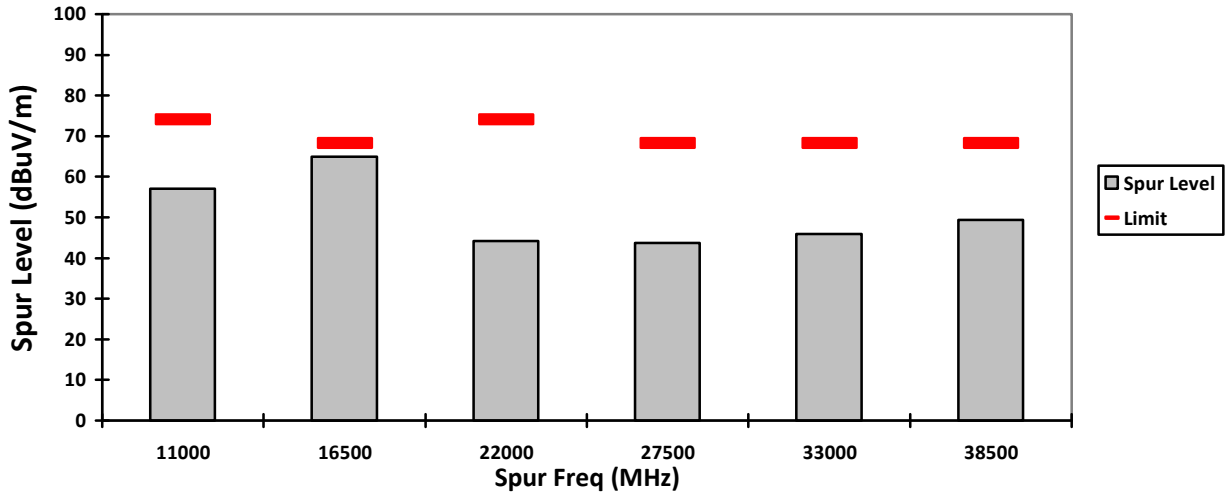
HORIZONTAL, QPK



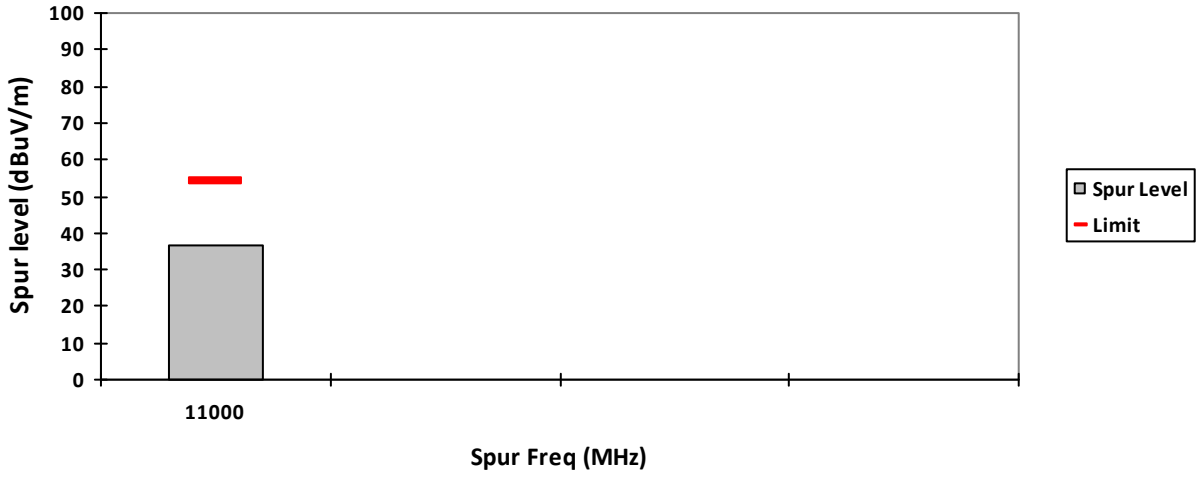
VERTICAL, PK



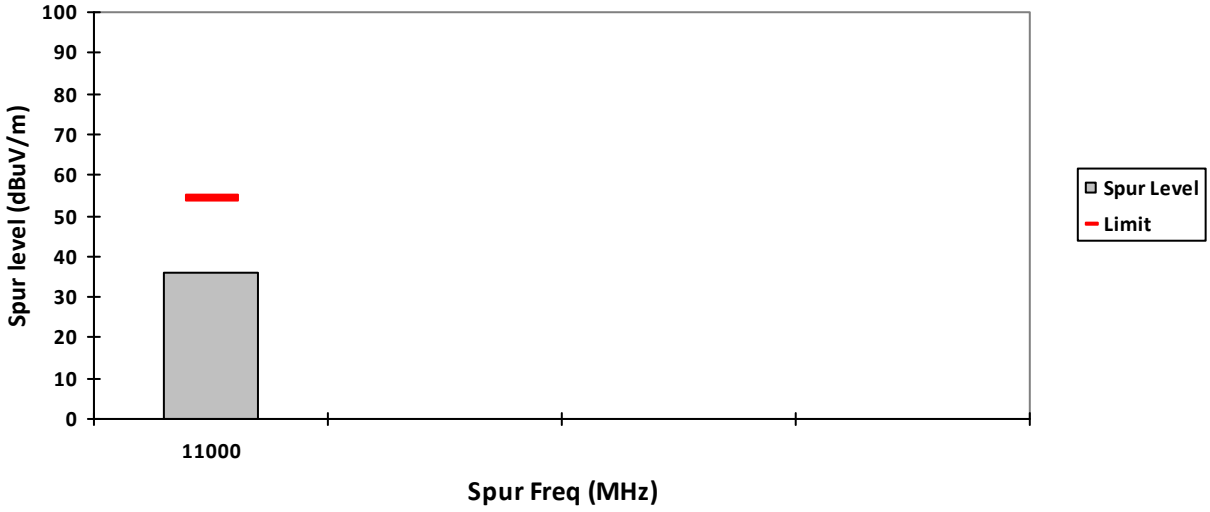
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: Mid Test Frequency: 5580.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11a 20MHz)

Radiated Emission (Mid Channel) tabular data

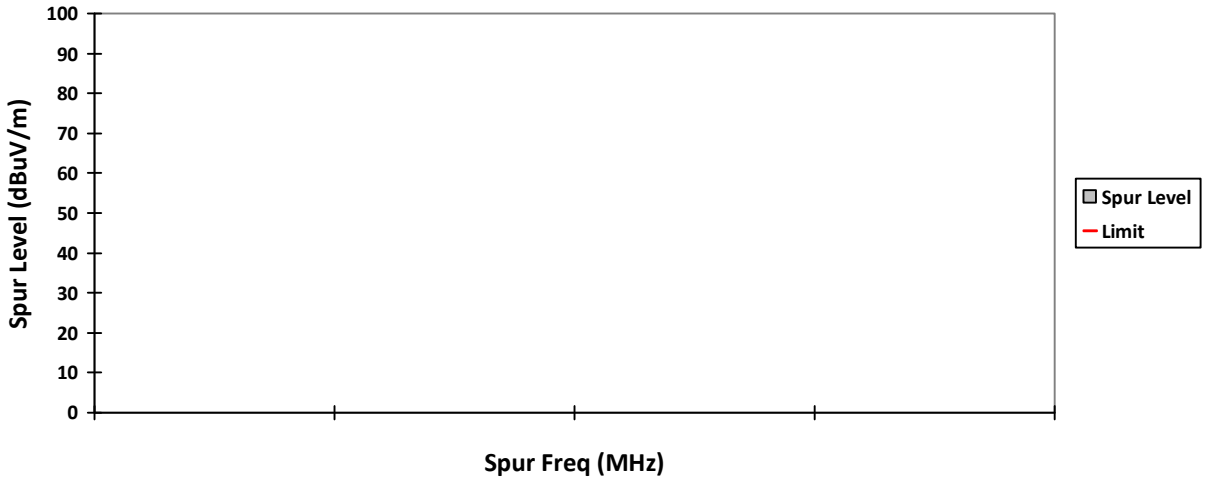
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11160	-	58.0475**	35.85**	-	74.0	54.0	-	15.9525 **	18.15 **	-
16740	-	64.9576**	-	-	68.2	-	-	3.2424 **	-	-
22320	-	43.2373**	-	-	74.0	-	-	30.7627 **	-	-
27900	-	44.3027**	-	-	68.2	-	-	23.8973 **	-	-
33480	-	46.6707**	-	-	68.2	-	-	21.5293 **	-	-
39060	-	51.6976**	-	-	74.0	-	-	22.3024 **	-	-
Horizontal Radiated Emission Result										
11160	-	58.3980**	35.9**	-	74.0	54.0	-	15.602 **	18.1 **	-
16740	-	63.9583**	-	-	68.2	-	-	4.2417 **	-	-
22320	-	42.1075**	-	-	74.0	-	-	31.8925 **	-	-
27900	-	44.4197**	-	-	68.2	-	-	23.7803 **	-	-
33480	-	47.2641**	-	-	68.2	-	-	20.9359 **	-	-
39060	-	50.4035**	-	-	74.0	-	-	23.5965 **	-	-

Remarks: Pass Result	Marginal Result	Fail Result

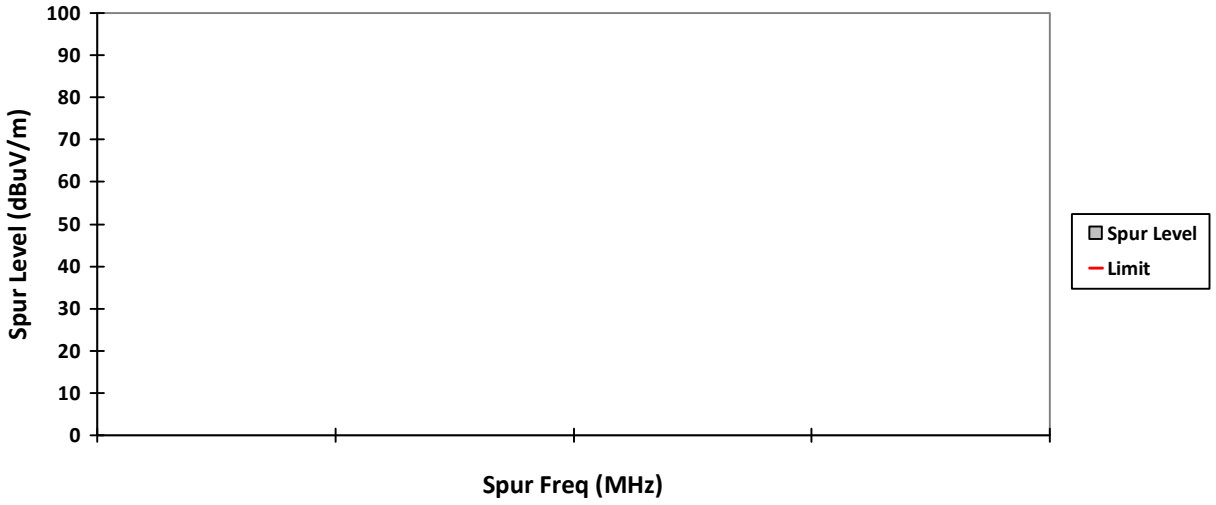
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Fri, 6 Aug, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

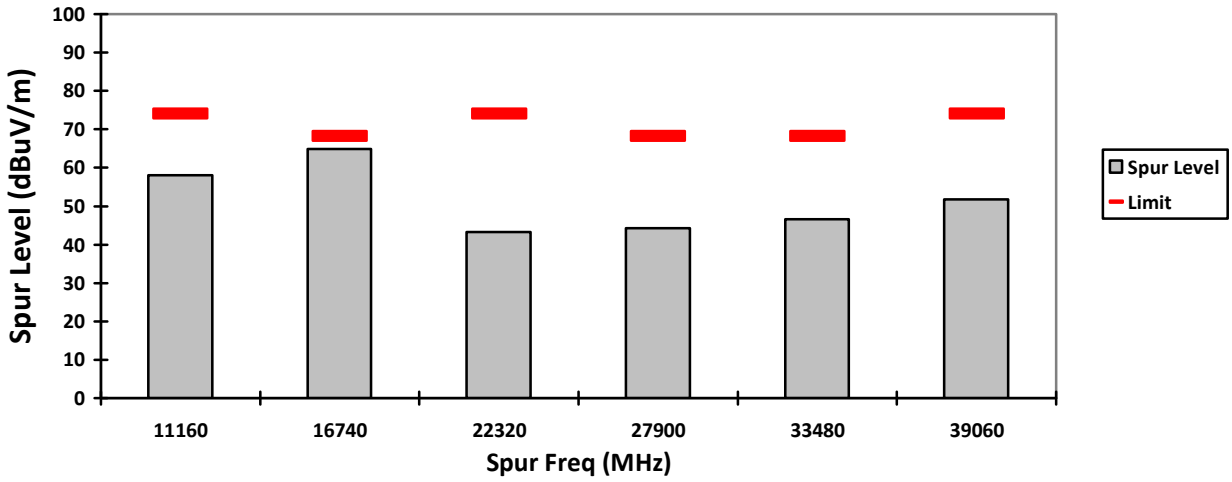
VERTICAL, QPK



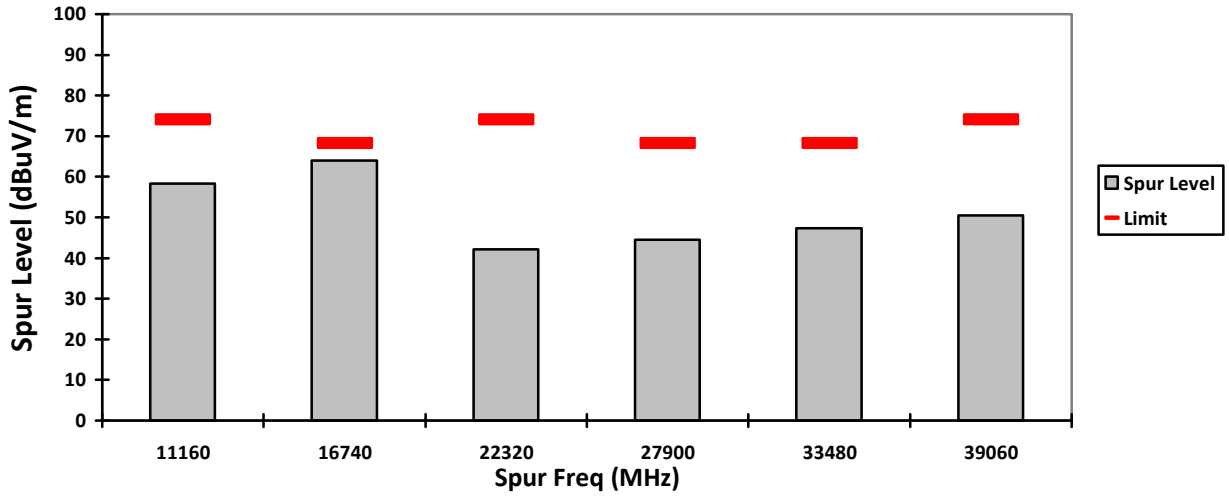
HORIZONTAL, QPK



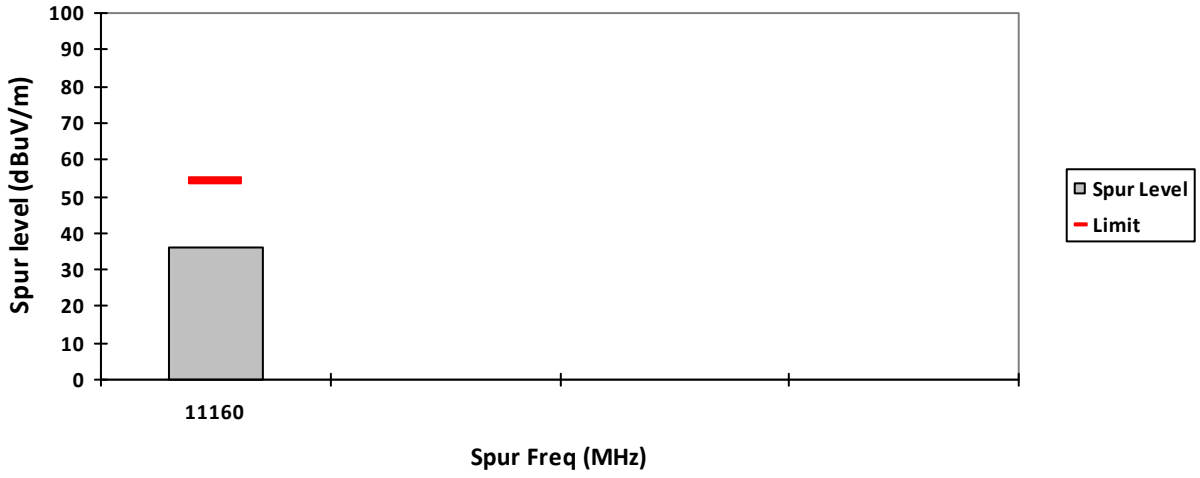
VERTICAL, PK



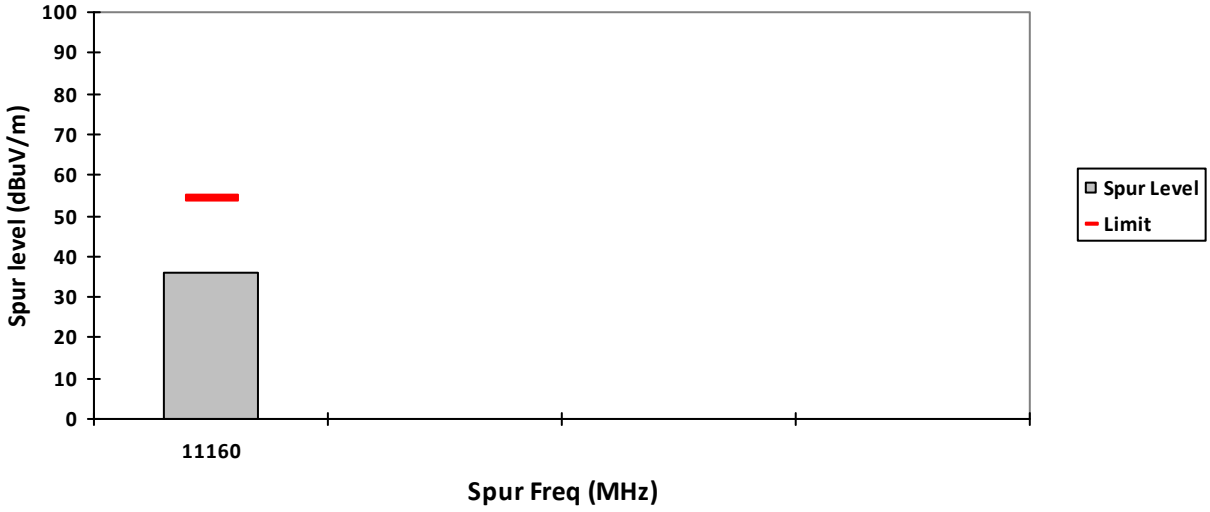
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: Straddle Test Frequency: 5720.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11a 20MHz)

Radiated Emission (Straddle Channel) tabular data

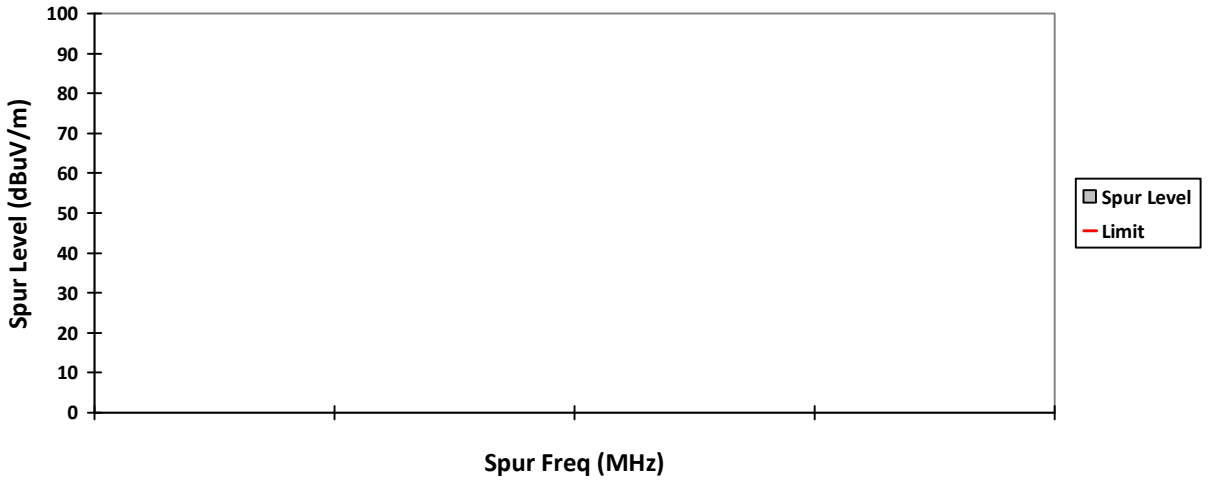
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11440	-	57.9839**	35.56**	-	74.0	54.0	-	16.0161 **	18.44 **	-
17160	-	63.4965**	-	-	68.2	-	-	4.7035 **	-	-
22880	-	42.0329**	-	-	74.0	-	-	31.9671 **	-	-
28600	-	45.2198**	-	-	68.2	-	-	22.9802 **	-	-
34320	-	46.2604**	-	-	68.2	-	-	21.9396 **	-	-
Horizontal Radiated Emission Result										
11440	-	58.1387**	35.61**	-	74.0	54.0	-	15.8613 **	18.39 **	-
17160	-	63.3902**	-	-	68.2	-	-	4.8098 **	-	-
22880	-	42.9014**	-	-	74.0	-	-	31.0986 **	-	-
28600	-	45.8522**	-	-	68.2	-	-	22.3478 **	-	-
34320	-	46.3232**	-	-	68.2	-	-	21.8768 **	-	-

Remarks: Pass Result	Marginal Result	Fail Result

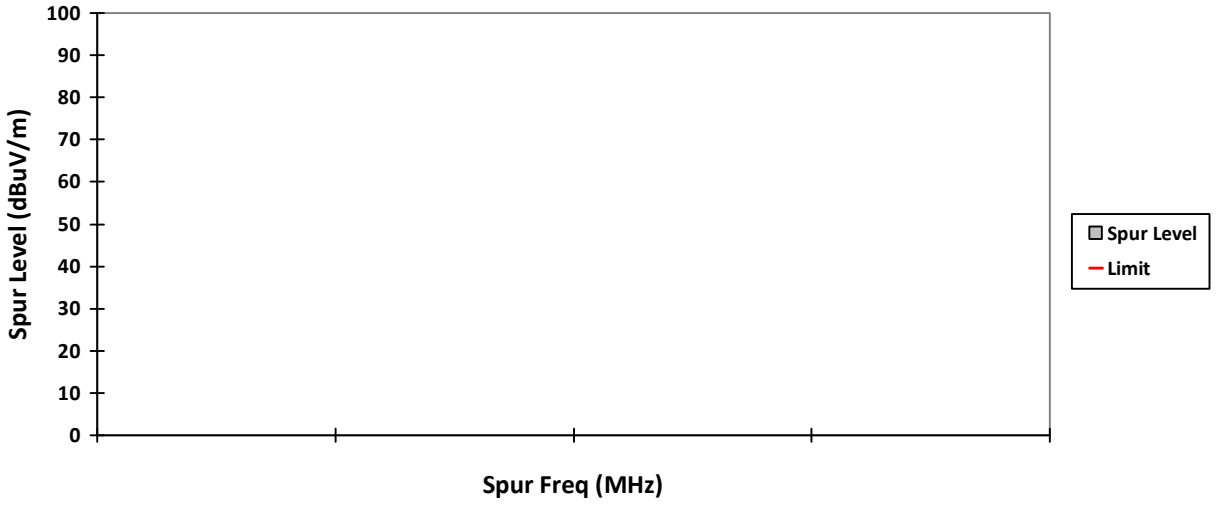
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Fri, 6 Aug, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

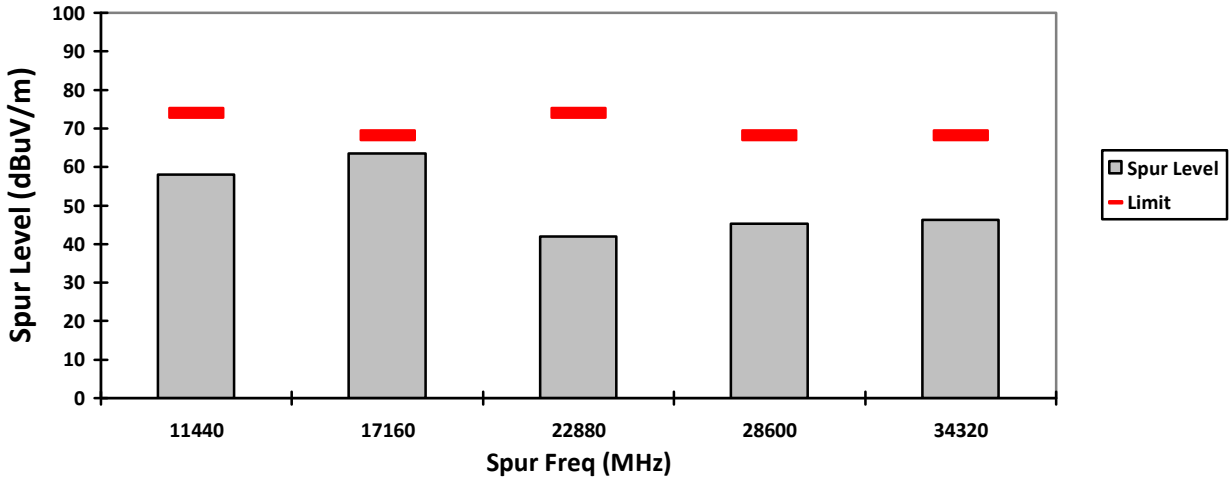
VERTICAL, QPK



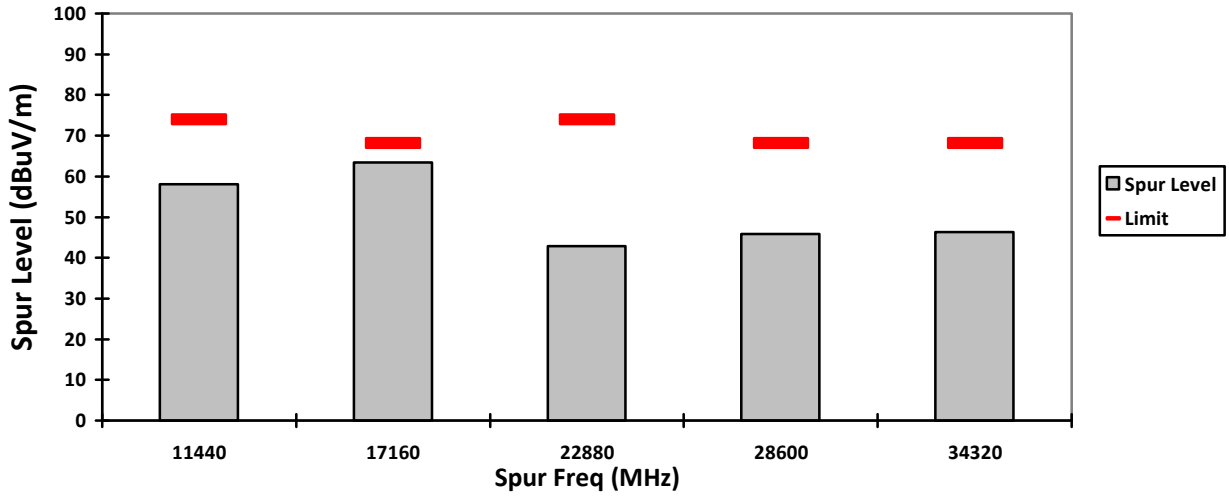
HORIZONTAL, QPK



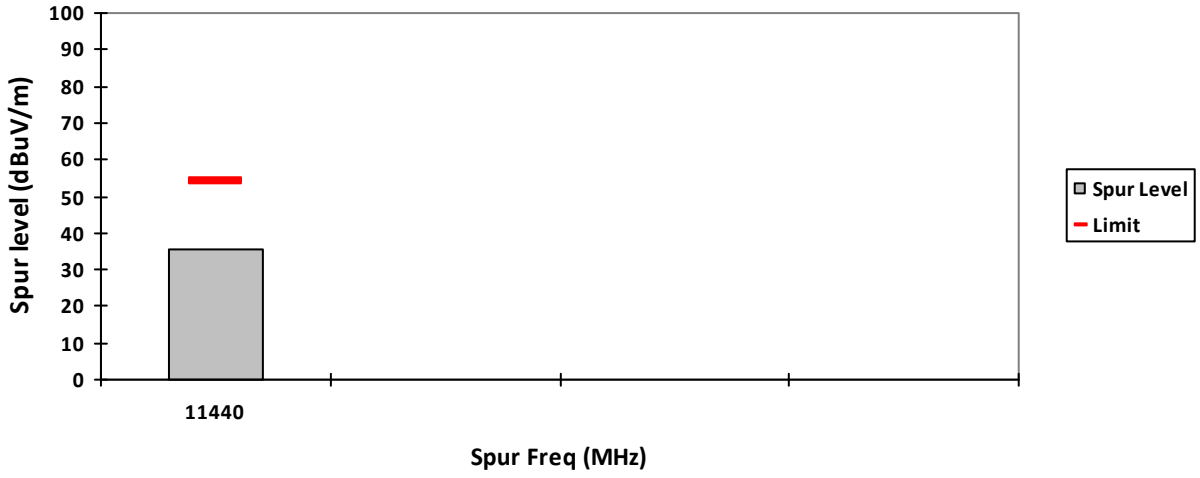
VERTICAL, PK



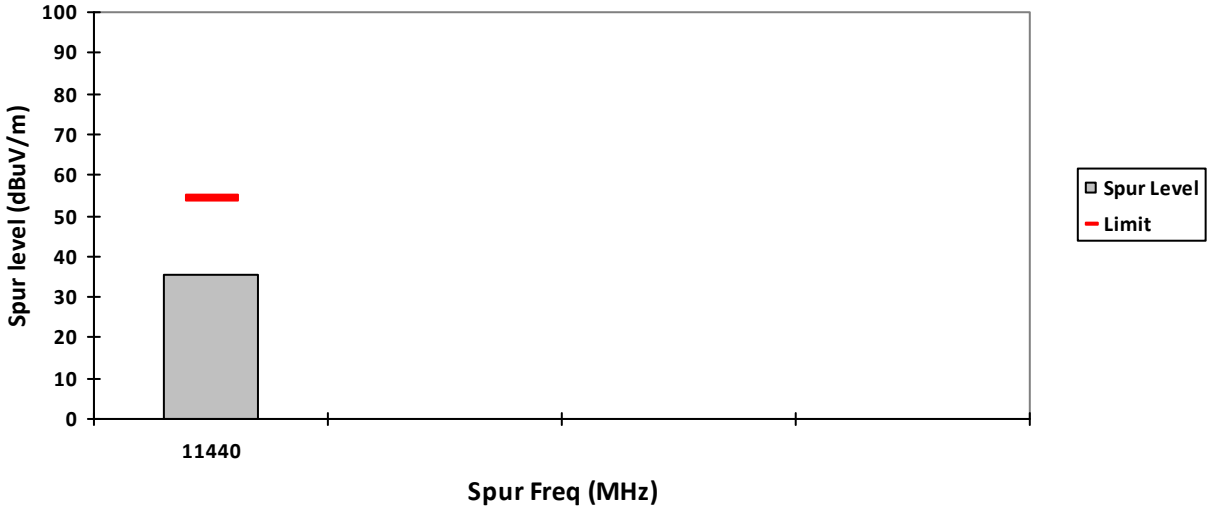
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: Low Test Frequency: 5745.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11a 20MHz)

Radiated Emission (Low Channel) tabular data

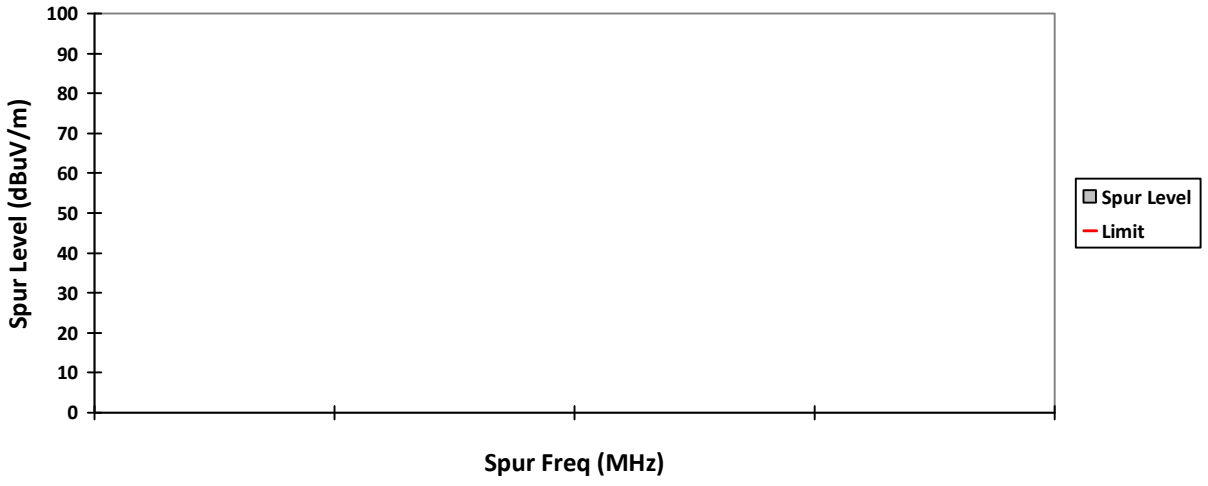
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11490	-	57.9723**	36.51**	-	74.0	54.0	-	16.0277 **	17.49 **	-
17235	-	64.2736**	-	-	68.2	-	-	3.9264 **	-	-
22980	-	42.2308**	-	-	74.0	-	-	31.7692 **	-	-
28725	-	45.1158**	-	-	68.2	-	-	23.0842 **	-	-
34470	-	47.2567**	-	-	68.2	-	-	20.9433 **	-	-
Horizontal Radiated Emission Result										
11490	-	57.2925**	36.1**	-	74.0	54.0	-	16.7075 **	17.9 **	-
17235	-	64.8505**	-	-	68.2	-	-	3.3495 **	-	-
22980	-	40.6705**	-	-	74.0	-	-	33.3295 **	-	-
28725	-	45.7614**	-	-	68.2	-	-	22.4386 **	-	-
34470	-	47.8121**	-	-	68.2	-	-	20.3879 **	-	-

Remarks: Pass Result	Marginal Result	Fail Result

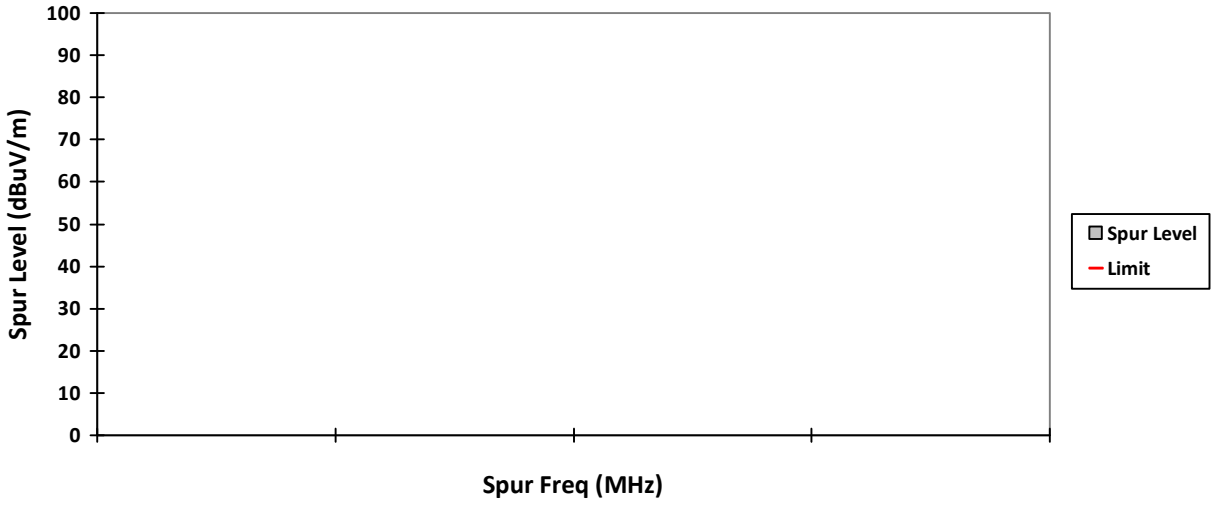
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Fri, 6 Aug, 2021**
System MU: 4.03dB

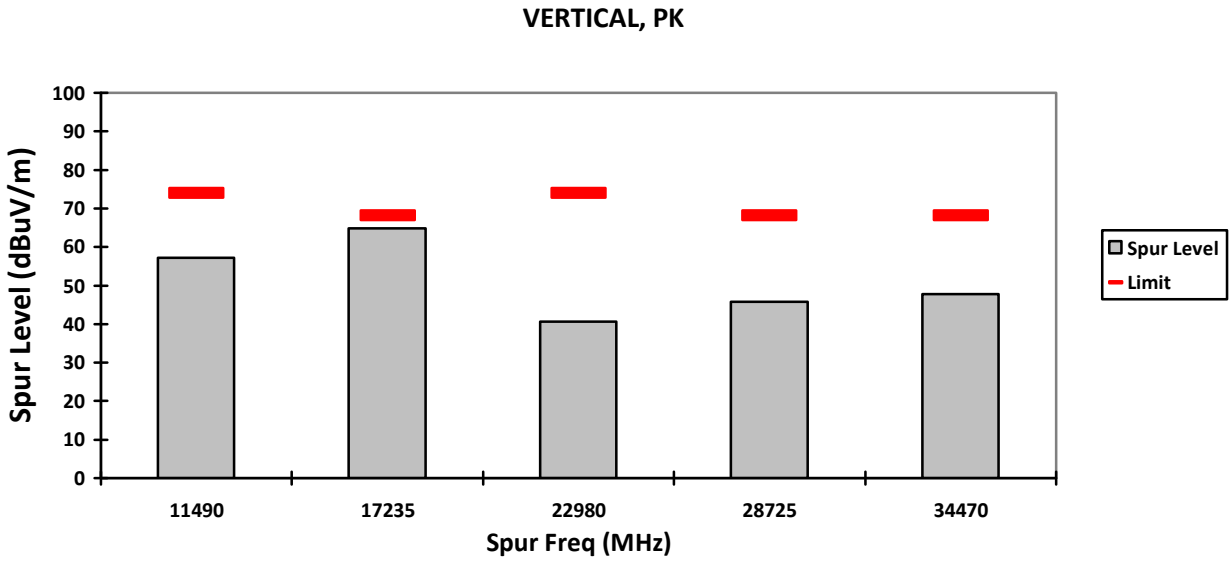
Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

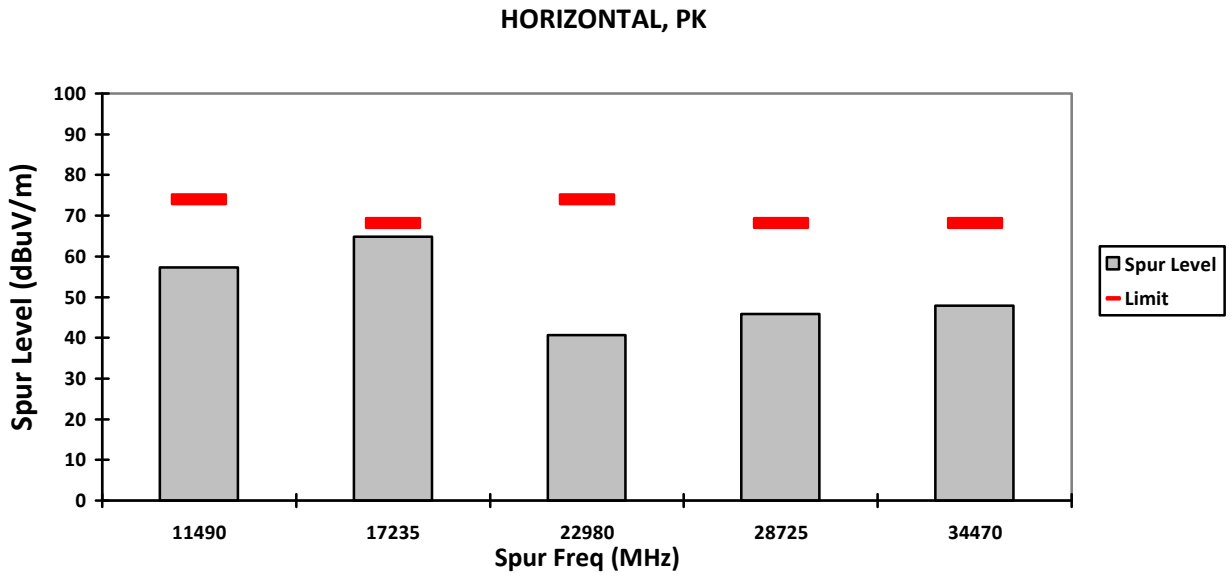
VERTICAL, QPK



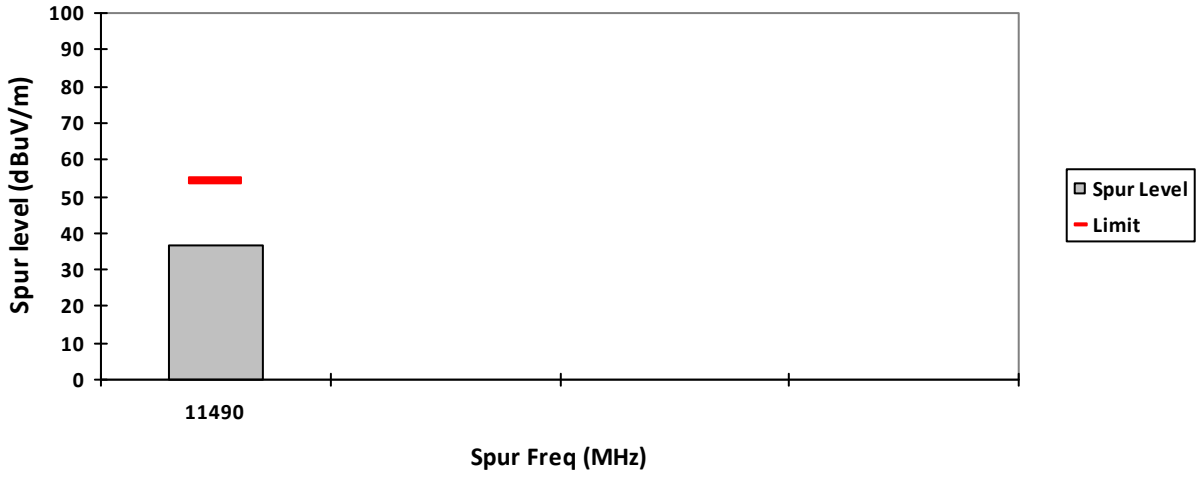
HORIZONTAL, QPK



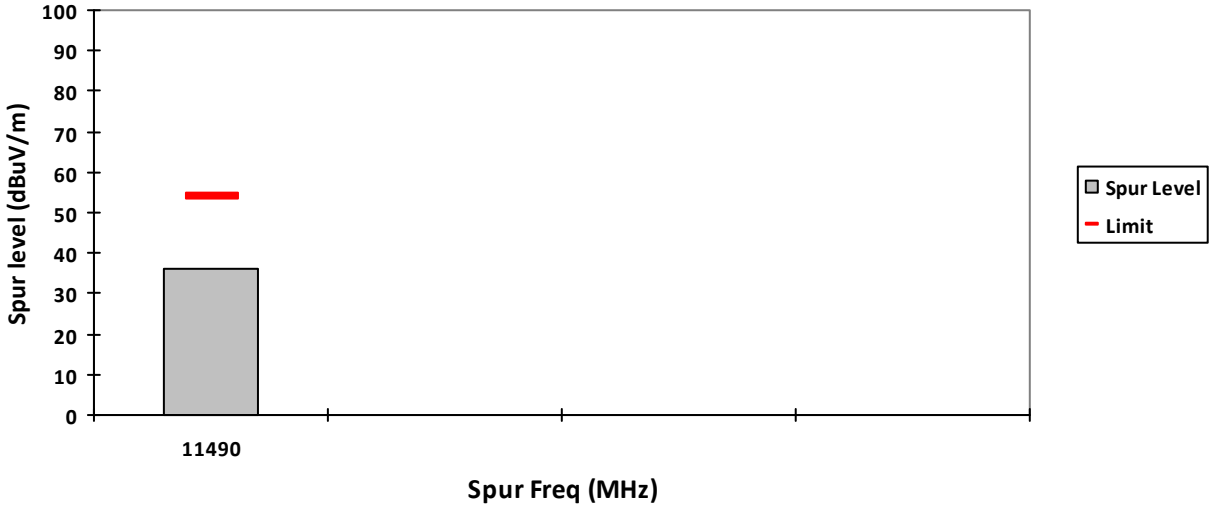

VERTICAL, PK
Spur Level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
11490
17235
22980
28725
34470
Spur Freq (MHz)
Spur Level
Limit


HORIZONTAL, PK
Spur Level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
11490
17235
22980
28725
34470
Spur Freq (MHz)
Spur Level
Limit

VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: Mid Test Frequency: 5785.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11a 20MHz)

Radiated Emission (Mid Channel) tabular data

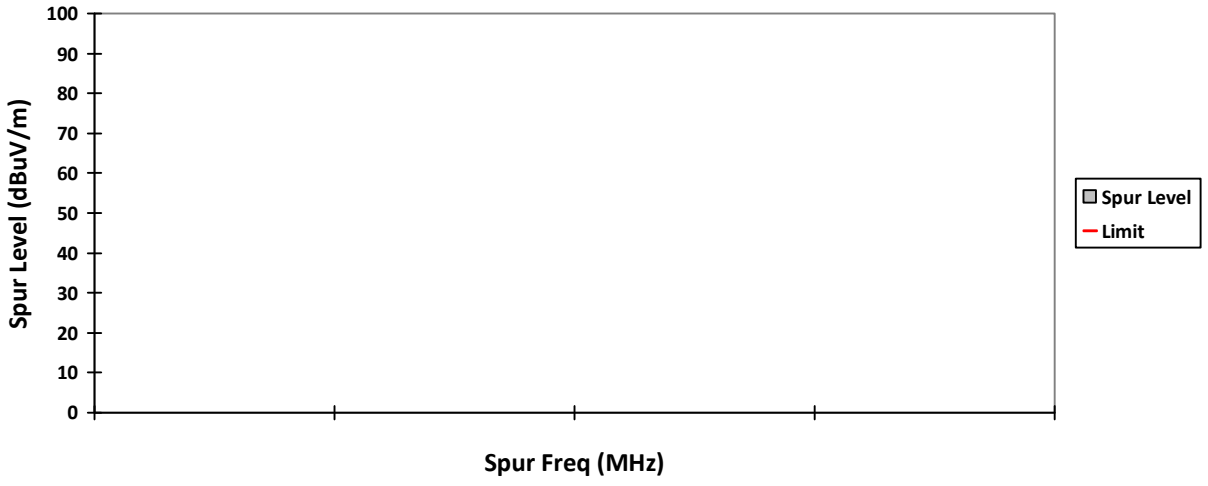
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11570	-	57.9621**	36.64**	-	74.0	54.0	-	16.0379 **	17.36 **	-
17355	-	65.3555**	-	-	68.2	-	-	2.8445 **	-	-
23140	-	42.8991**	-	-	68.2	-	-	25.3009 **	-	-
28925	-	45.0199**	-	-	68.2	-	-	23.1801 **	-	-
34710	-	46.2205**	-	-	68.2	-	-	21.9795 **	-	-
Horizontal Radiated Emission Result										
11570	-	59.0872**	36.43**	-	74.0	54.0	-	14.9128 **	17.57 **	-
17355	-	64.7579**	-	-	68.2	-	-	3.4421 **	-	-
23140	-	42.1974**	-	-	68.2	-	-	26.0026 **	-	-
28925	-	44.4994**	-	-	68.2	-	-	23.7006 **	-	-
34710	-	45.7079**	-	-	68.2	-	-	22.4921 **	-	-

Remarks: Pass Result	Marginal Result	Fail Result

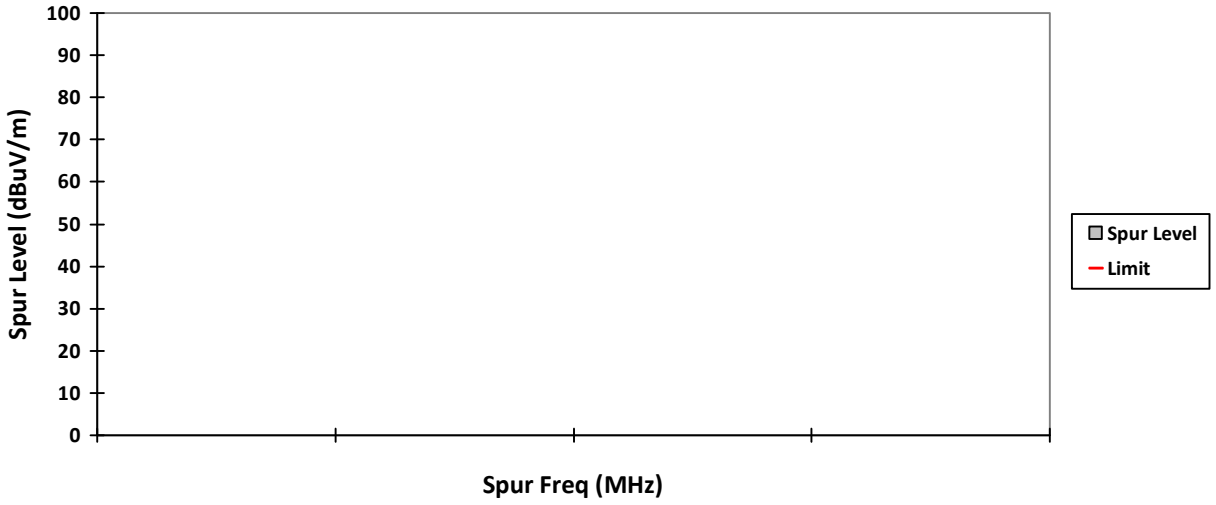
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Fri, 6 Aug, 2021**
System MU: 4.03dB

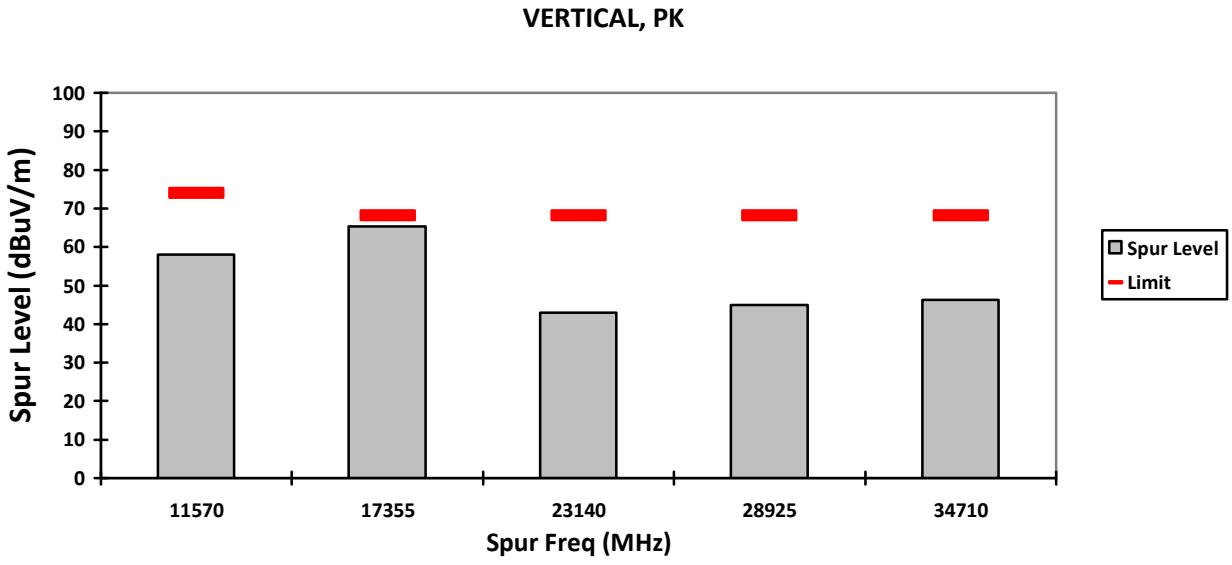
Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

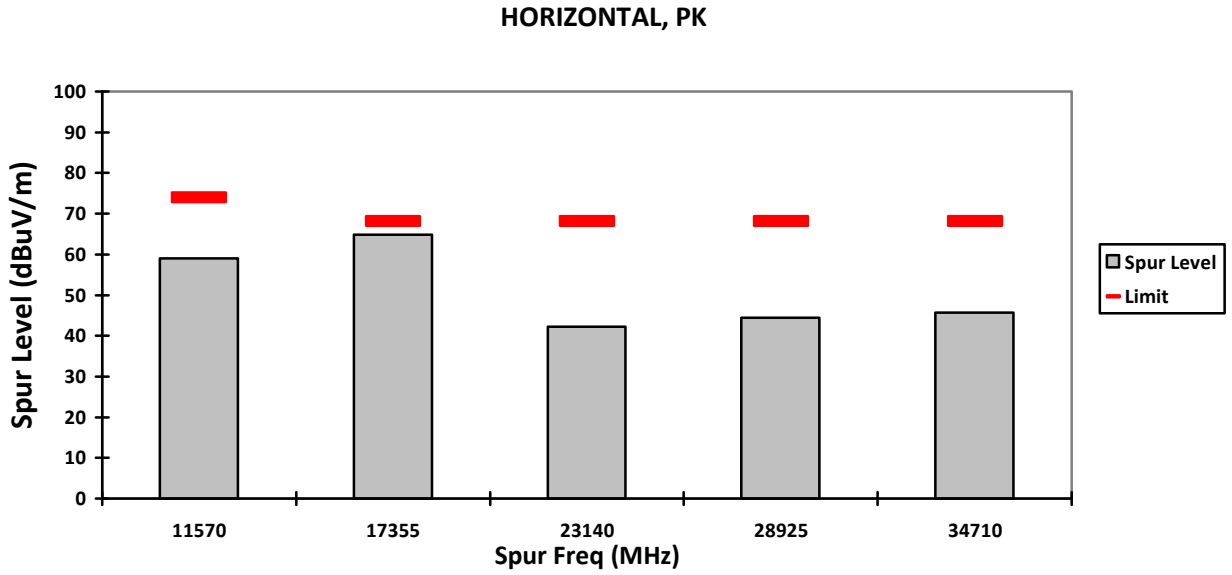
VERTICAL, QPK



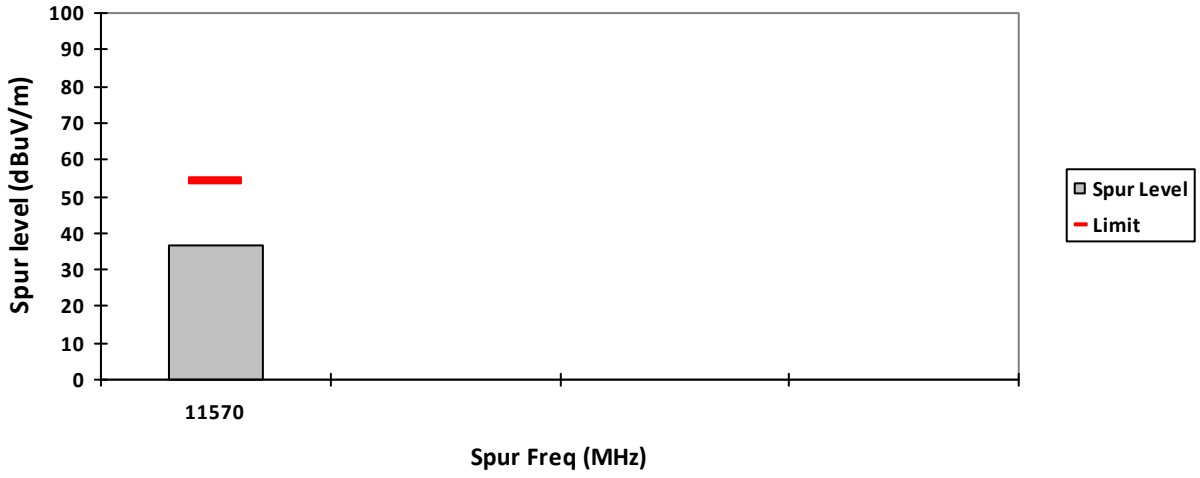
HORIZONTAL, QPK



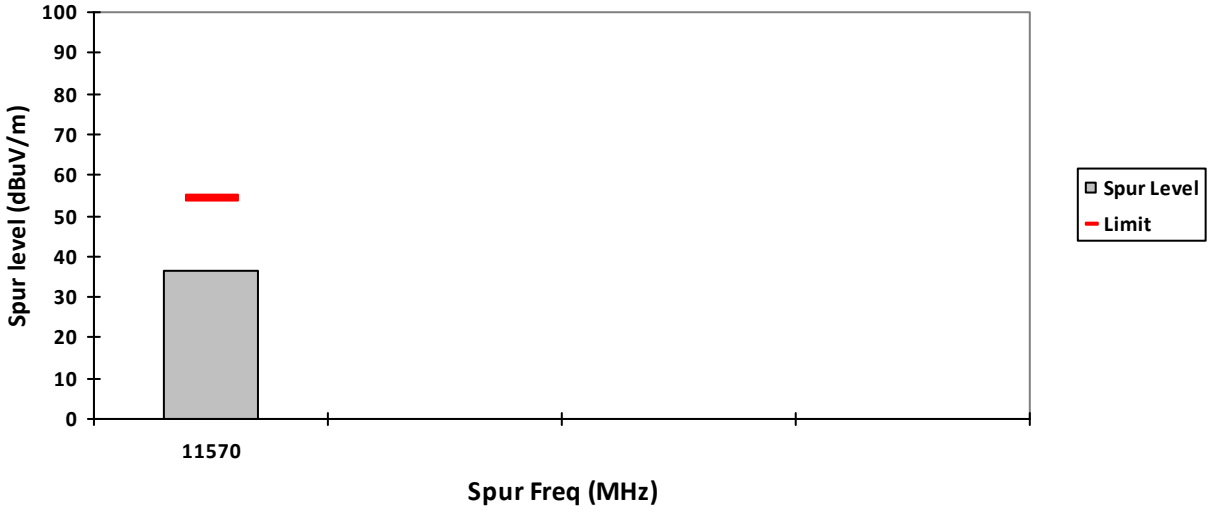

VERTICAL, PK
Spur Level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
11570
17355
23140
28925
34710
Spur Freq (MHz)
Spur Level
Limit


HORIZONTAL, PK
Spur Level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
11570
17355
23140
28925
34710
Spur Freq (MHz)
Spur Level
Limit

VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: High Test Frequency: 5825.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11a 20MHz)

Radiated Emission (High Channel) tabular data

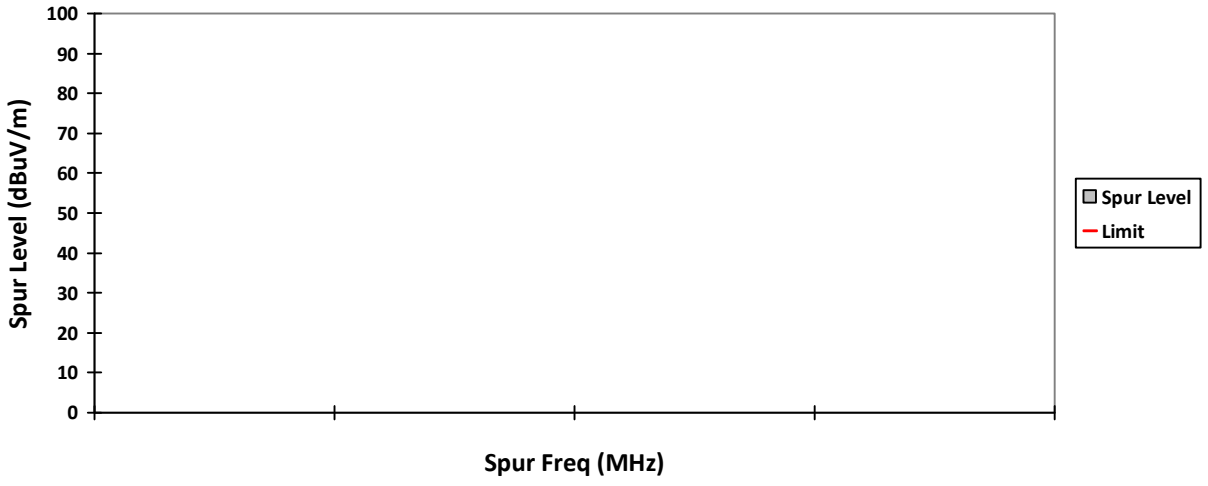
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11650	-	59.1611**	36.76**	-	74.0	54.0	-	14.8389 **	17.24 **	-
17475	-	65.9128**	-	-	68.2	-	-	2.2872 **	-	-
23300	-	42.3186**	-	-	68.2	-	-	25.8814 **	-	-
29125	-	44.4716**	-	-	68.2	-	-	23.7284 **	-	-
34950	-	47.6452**	-	-	68.2	-	-	20.5548 **	-	-
Horizontal Radiated Emission Result										
11650	-	57.9998**	36.86**	-	74.0	54.0	-	16.0002 **	17.14 **	-
17475	-	65.2112**	-	-	68.2	-	-	2.9888 **	-	-
23300	-	42.5958**	-	-	68.2	-	-	25.6042 **	-	-
29125	-	45.2111**	-	-	68.2	-	-	22.9889 **	-	-
34950	-	46.8760**	-	-	68.2	-	-	21.324 **	-	-

Remarks: Pass Result	Marginal Result	Fail Result

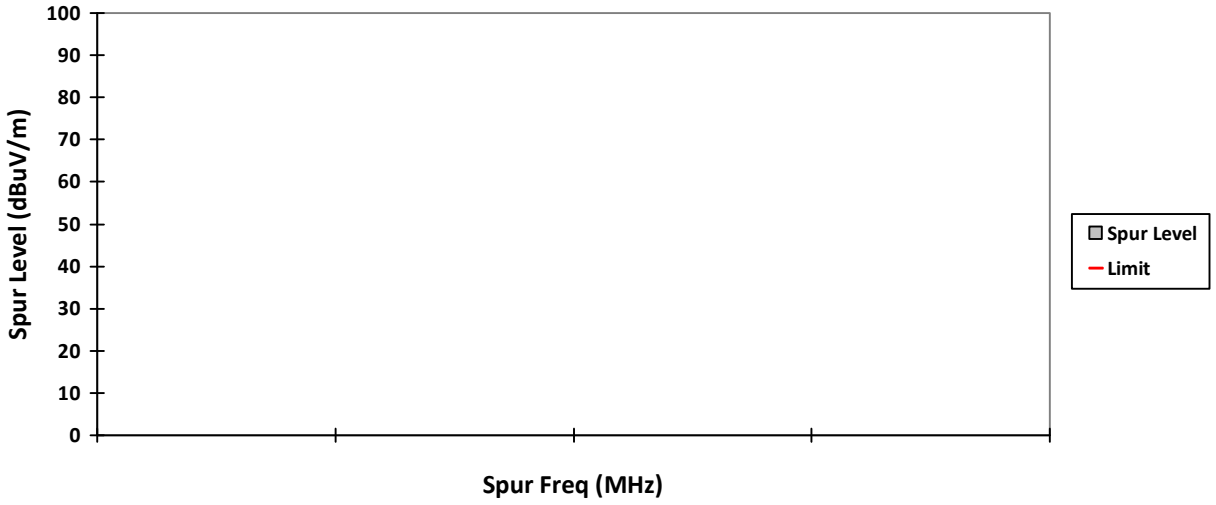
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Fri, 6 Aug, 2021**
System MU: 4.03dB

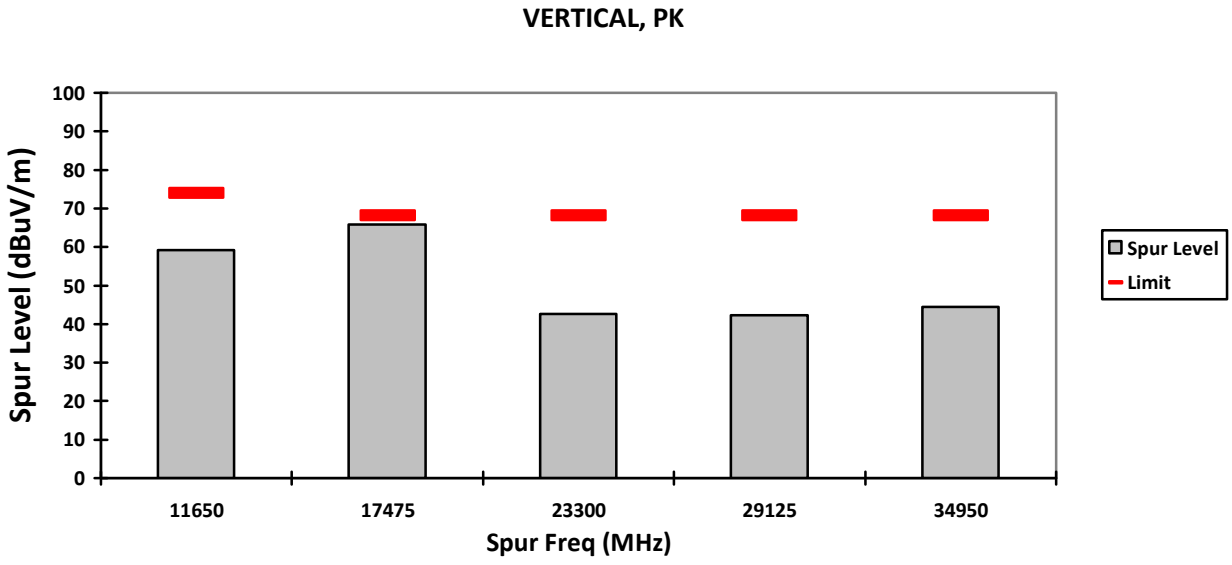
Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

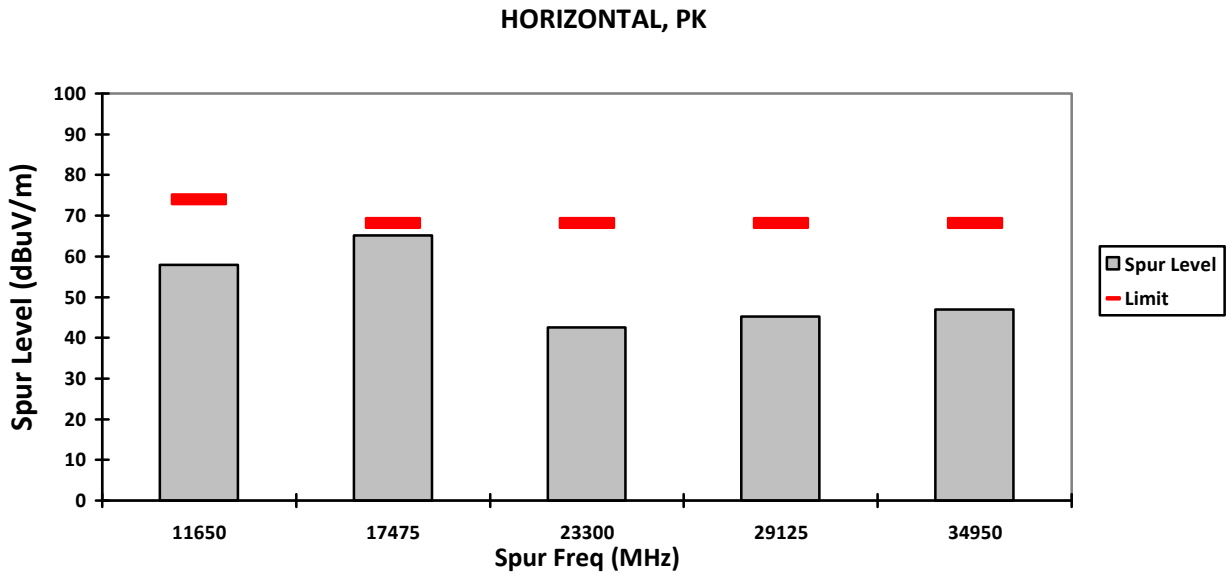
VERTICAL, QPK



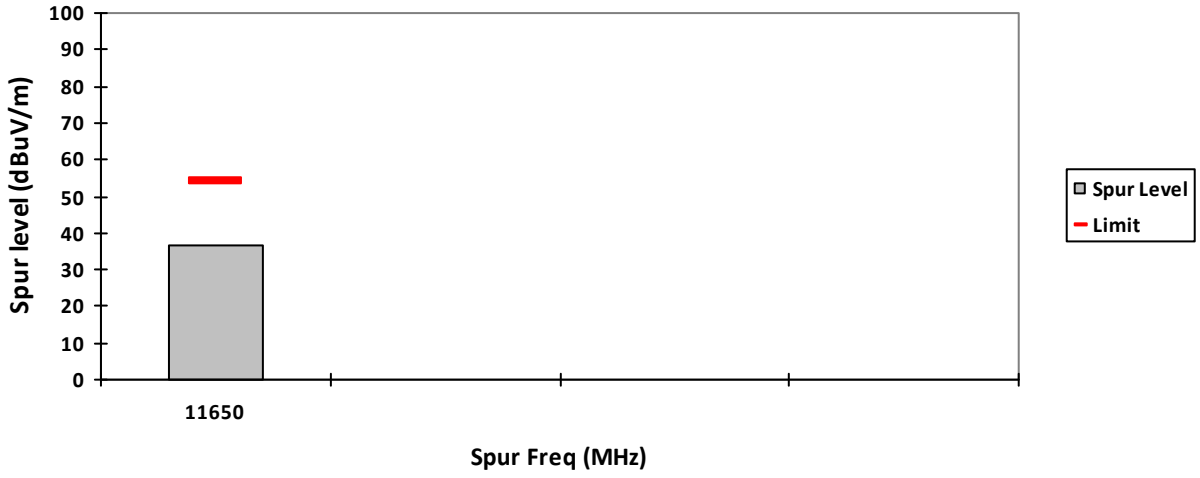
HORIZONTAL, QPK



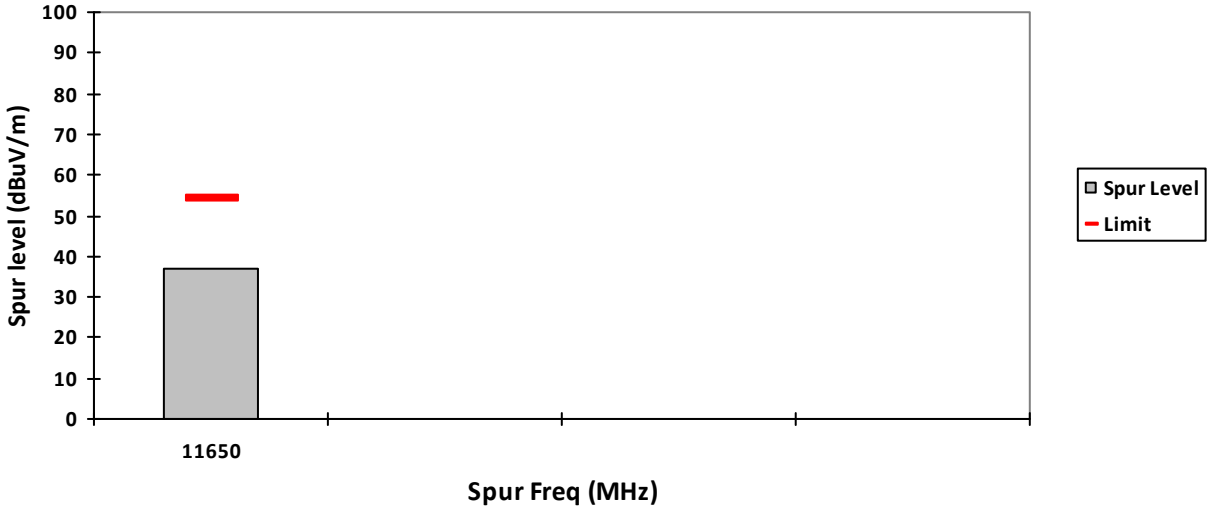

VERTICAL, PK
Spur Level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
11650
17475
23300
29125
34950
Spur Freq (MHz)
Spur Level
Limit


HORIZONTAL, PK
Spur Level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
11650
17475
23300
29125
34950
Spur Freq (MHz)
Spur Level
Limit

VERTICAL, AV



HORIZONTAL, AV



802.11n (HT20)

Test: WIFI SAC Transmitter Radiated Emission
Model#: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: Low Test Frequency: 5180.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11n 20MHz)

Radiated Emission (Low Channel) tabular data

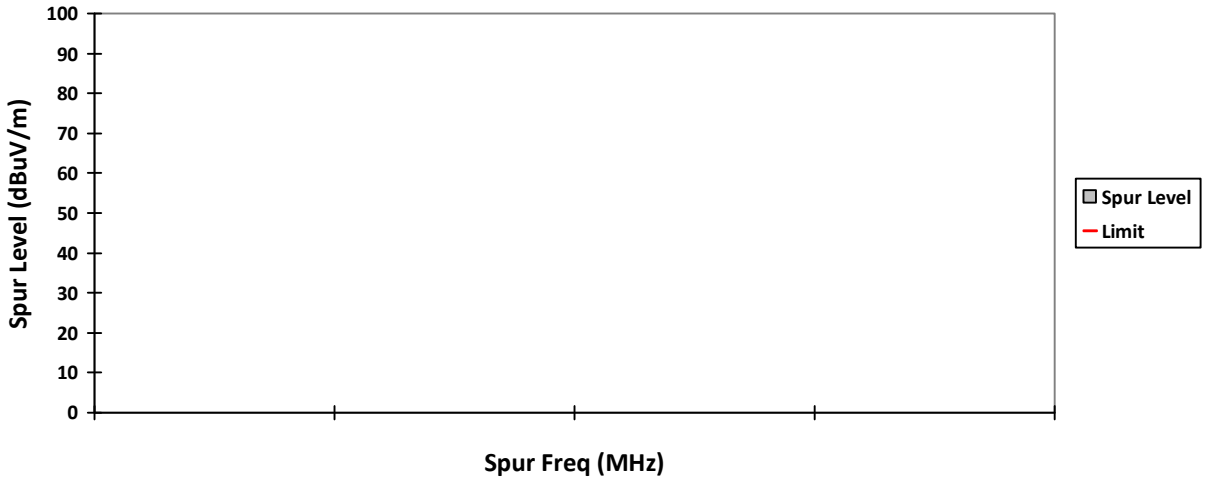
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10360	-	57.6097**	-	-	68.2	-	-	10.5903 **	-	-
15540	-	60.7510**	37.88**	-	74.0	54.0	-	13.249 **	16.12 **	-
20720	-	41.9583**	-	-	74.0	-	-	32.0417 **	-	-
25900	-	44.2174**	-	-	68.2	-	-	23.9826 **	-	-
31080	-	46.5268**	-	-	68.2	-	-	21.6732 **	-	-
36260	-	47.9740**	-	-	68.2	-	-	20.226 **	-	-
Horizontal Radiated Emission Result										
10360	-	58.6499**	-	-	68.2	-	-	9.5501 **	-	-
15540	-	60.7973**	37.85**	-	74.0	54.0	-	13.2027 **	16.15 **	-
20720	-	40.8614**	-	-	74.0	-	-	33.1386 **	-	-
25900	-	43.3147**	-	-	68.2	-	-	24.8853 **	-	-
31080	-	45.4791**	-	-	68.2	-	-	22.7209 **	-	-
36260	-	48.7874**	-	-	68.2	-	-	19.4126 **	-	-

Remarks: Pass Result	Marginal Result	Fail Result

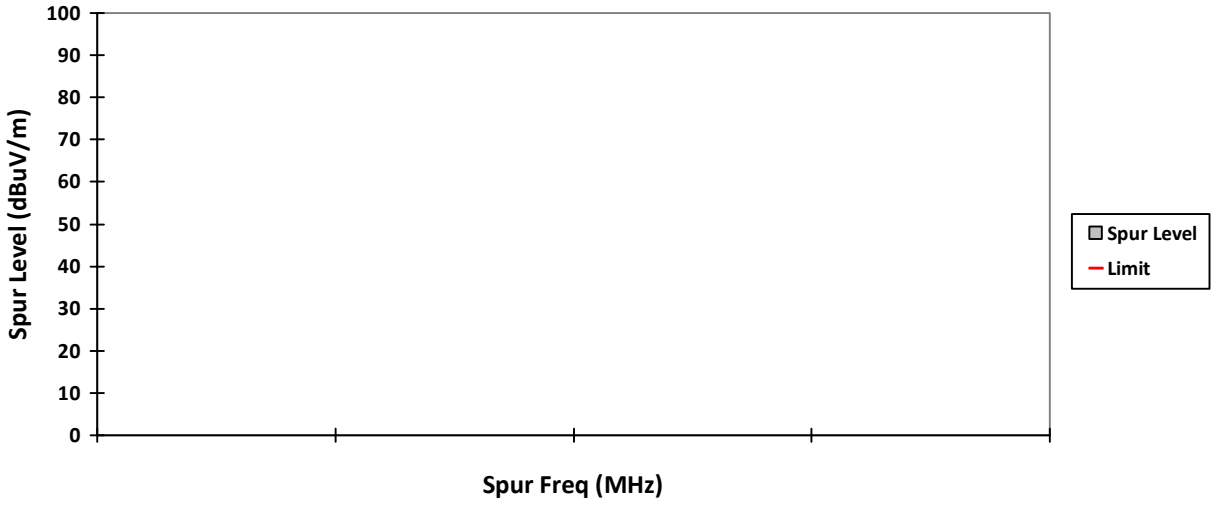
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Fri, 6 Aug, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

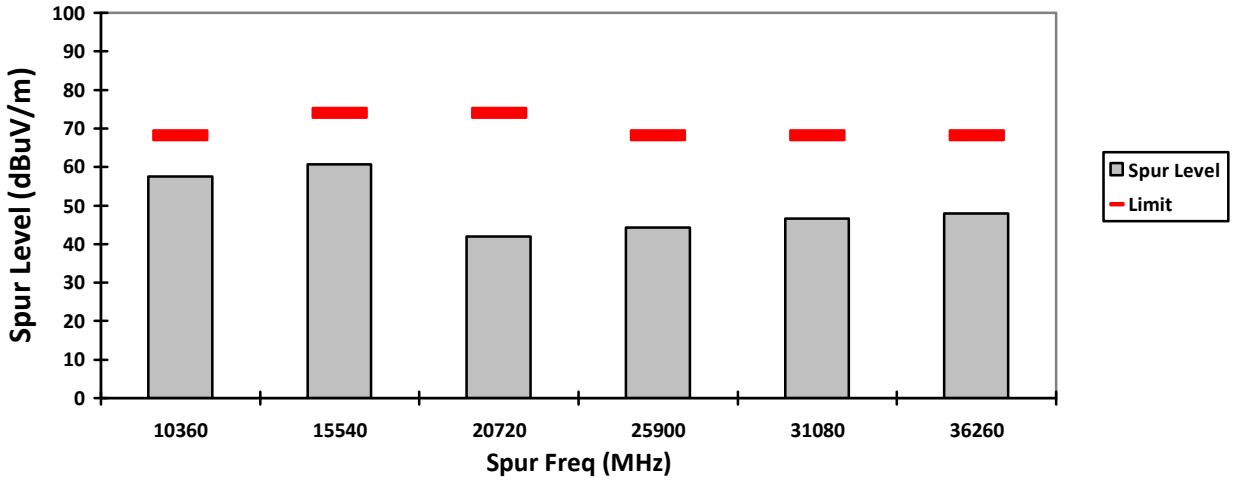
VERTICAL, QPK



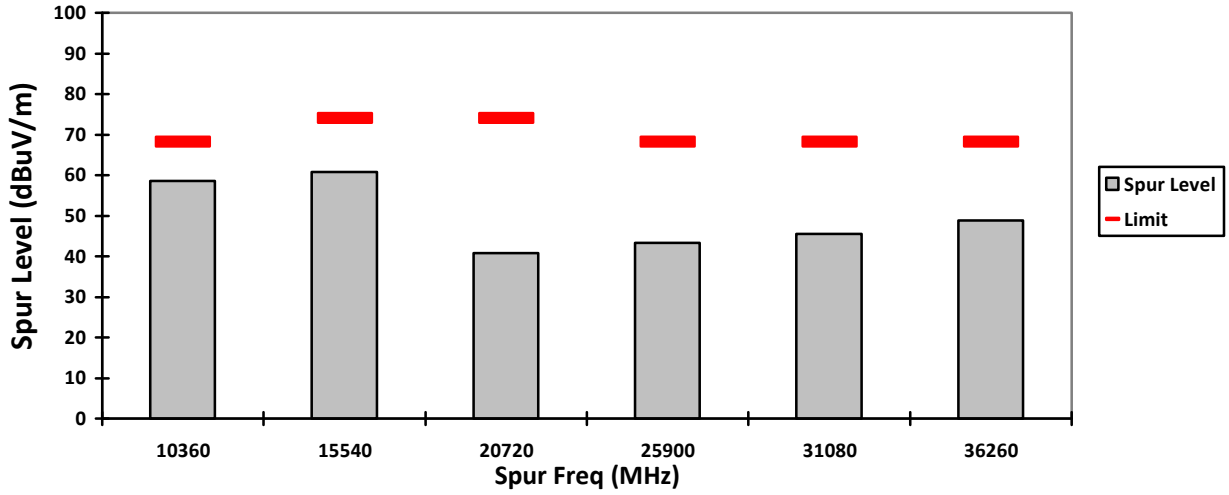
HORIZONTAL, QPK

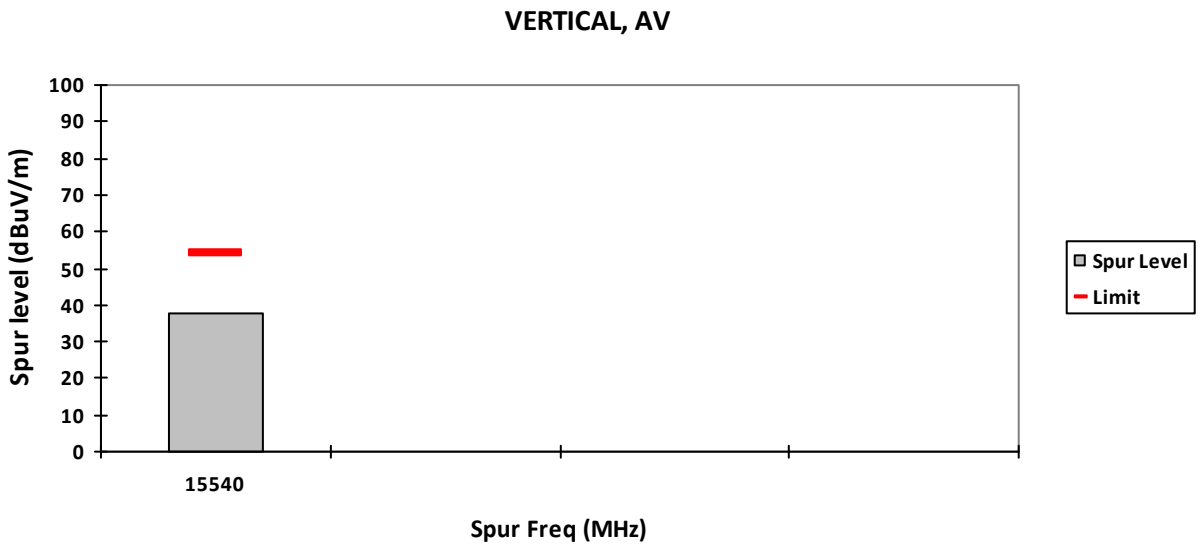


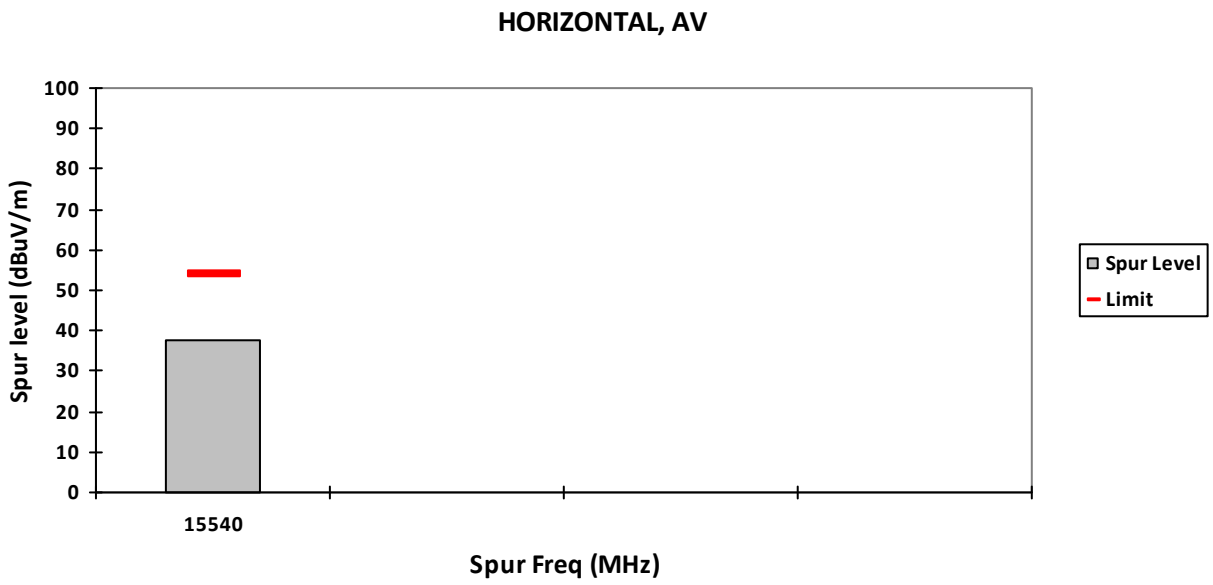
VERTICAL, PK



HORIZONTAL, PK




VERTICAL, AV
Spur level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
15540
Spur Freq (MHz)
Spur Level
Limit


HORIZONTAL, AV
Spur level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
15540
Spur Freq (MHz)
Spur Level
Limit

Test: WIFI SAC Transmitter Radiated Emission
Model#: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: Mid Test Frequency: 5220.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11n 20MHz)

Radiated Emission (Mid Channel) tabular data

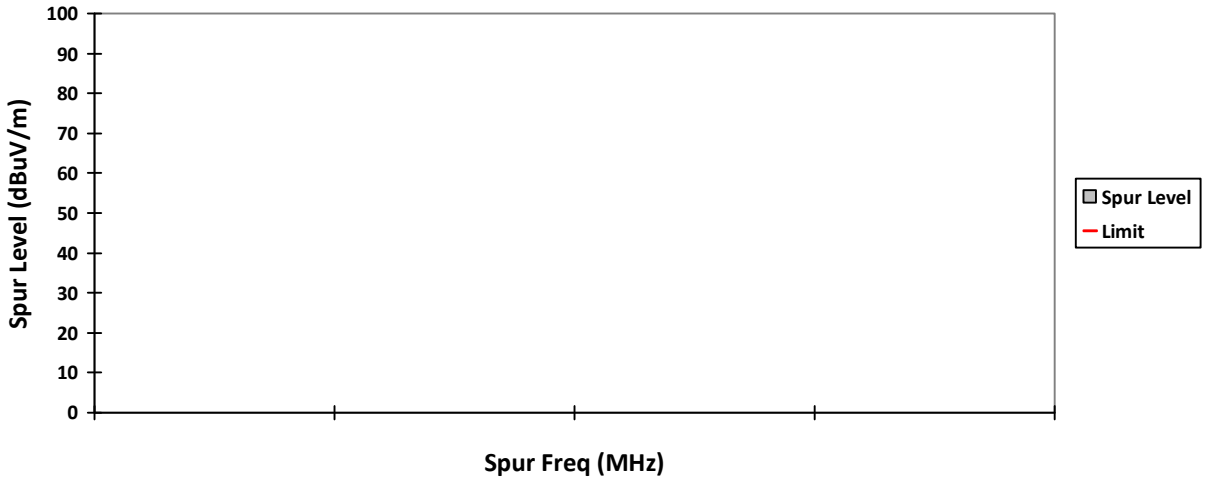
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10440	-	57.9301**	-	-	68.2	-	-	10.2699 **	-	-
15660	-	62.3490**	37.63**	-	74.0	54.0	-	11.651 **	16.37 **	-
20880	-	43.0837**	-	-	74.0	-	-	30.9163 **	-	-
26100	-	44.9101**	-	-	68.2	-	-	23.2899 **	-	-
31320	-	45.8888**	-	-	74.0	-	-	28.1112 **	-	-
36540	-	46.6832**	-	-	74.0	-	-	27.3168 **	-	-
Horizontal Radiated Emission Result										
10440	-	57.9594**	-	-	68.2	-	-	10.2406 **	-	-
15660	-	60.4108**	37.58**	-	74.0	54.0	-	13.5892 **	16.42 **	-
20880	-	44.4865**	-	-	74.0	-	-	29.5135 **	-	-
26100	-	44.1293**	-	-	68.2	-	-	24.0707 **	-	-
31320	-	45.3279**	-	-	74.0	-	-	28.6721 **	-	-
36540	-	49.1088**	-	-	74.0	-	-	24.8912 **	-	-

Remarks: Pass Result	Marginal Result	Fail Result

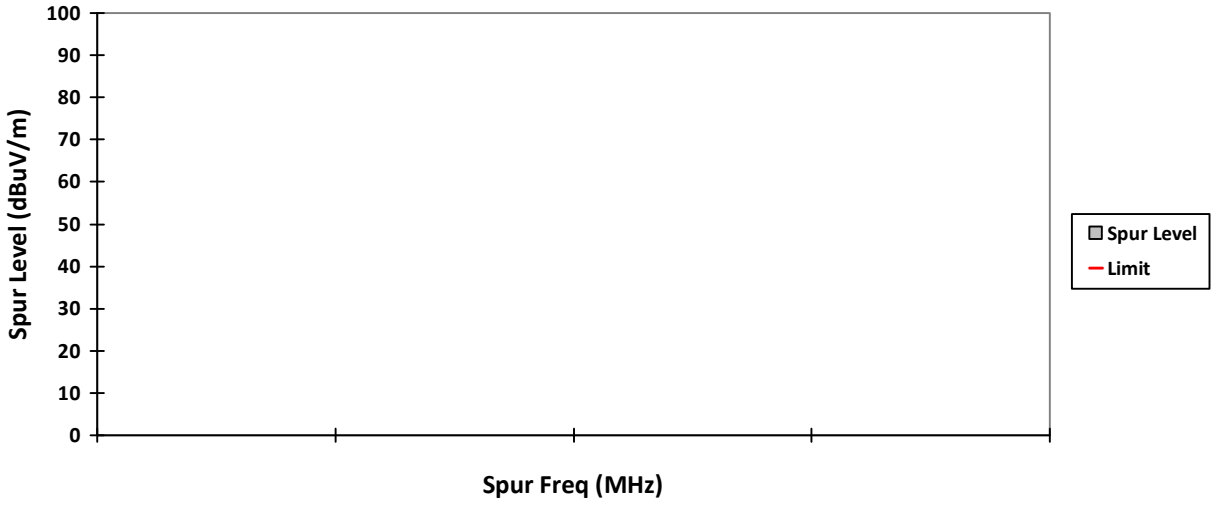
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Fri, 6 Aug, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

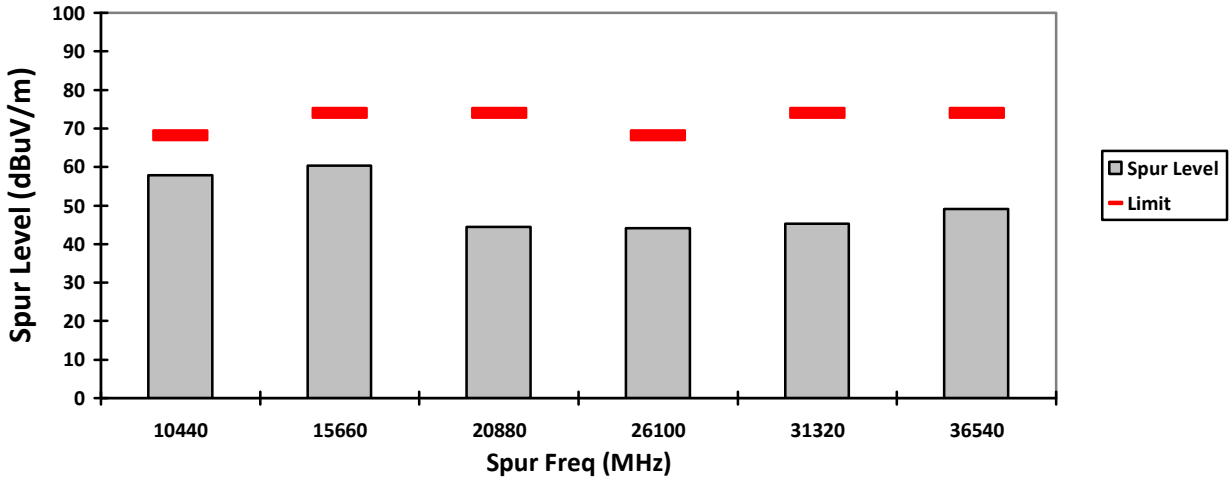
VERTICAL, QPK



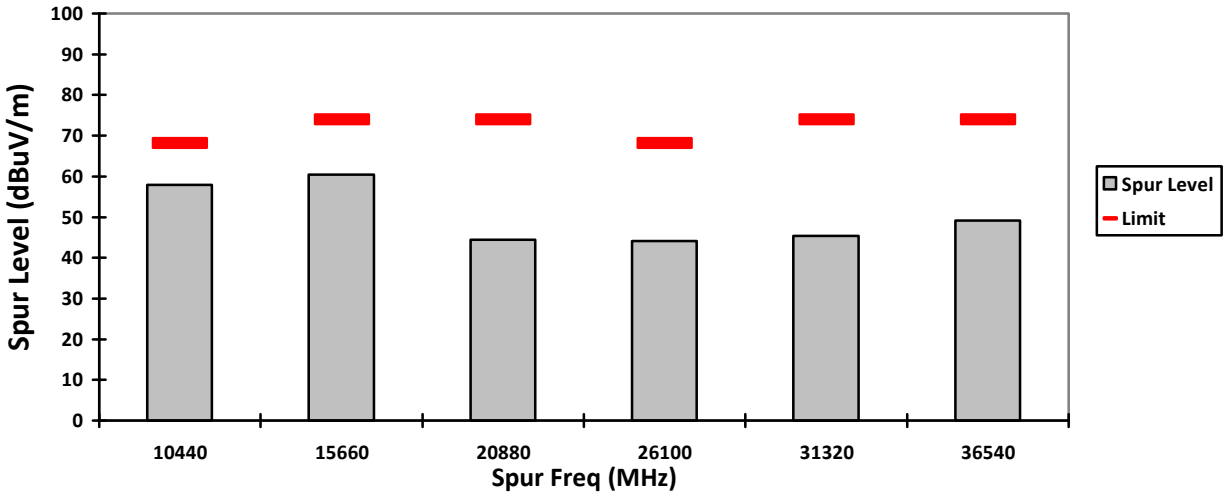
HORIZONTAL, QPK

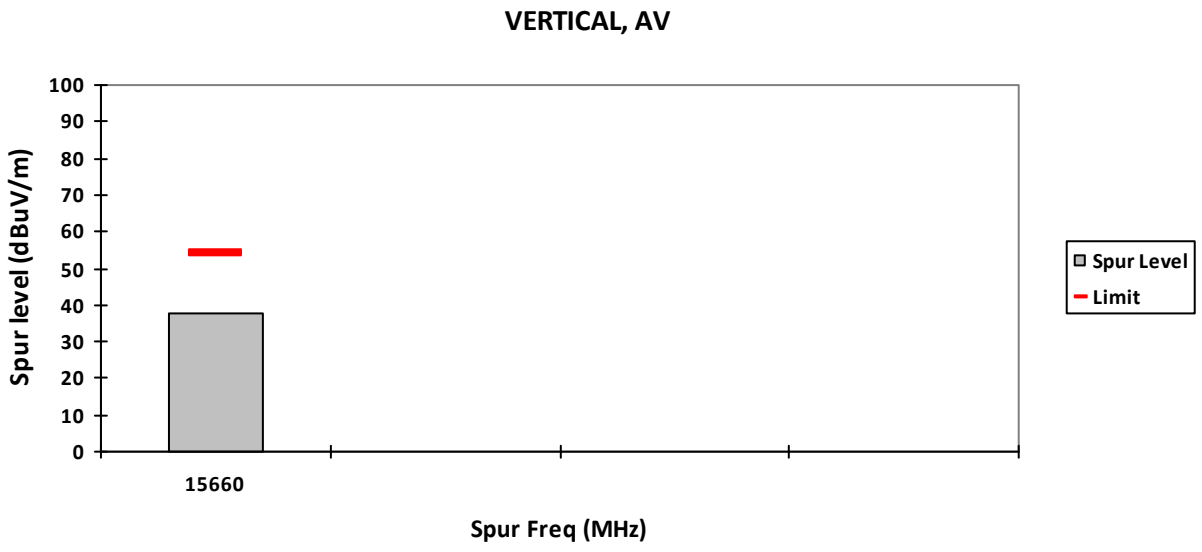


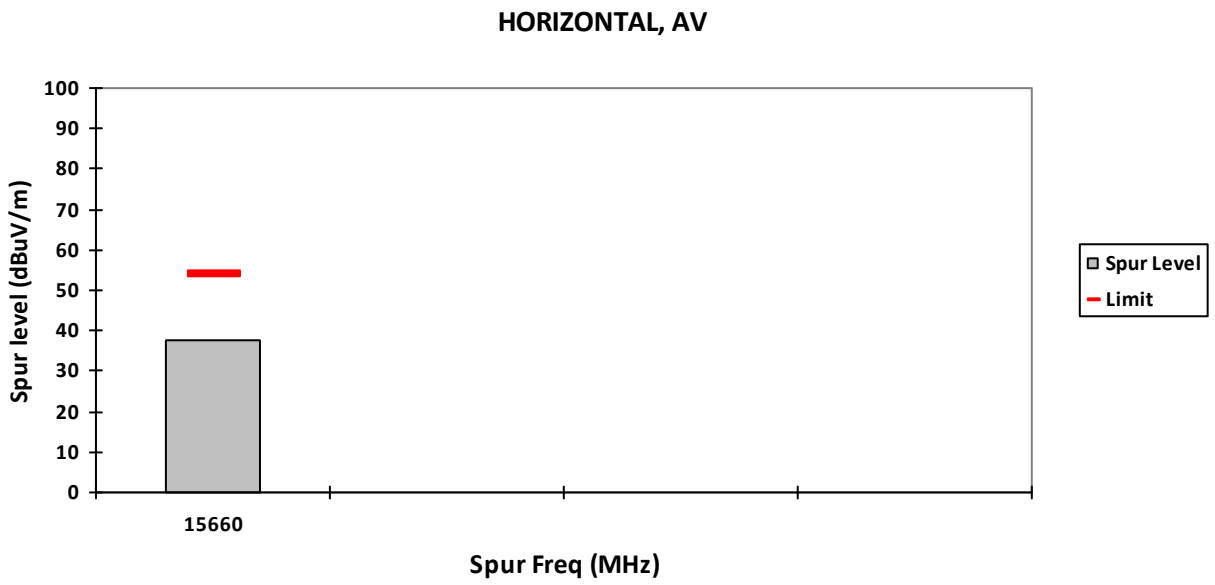
VERTICAL, PK



HORIZONTAL, PK




VERTICAL, AV
Spur level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
15660
Spur Freq (MHz)
Spur Level
Limit


HORIZONTAL, AV
Spur level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
15660
Spur Freq (MHz)
Spur Level
Limit

Test: WIFI SAC Transmitter Radiated Emission
Model#: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: High Test Frequency: 5240.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11n 20MHz)

Radiated Emission (High Channel) tabular data

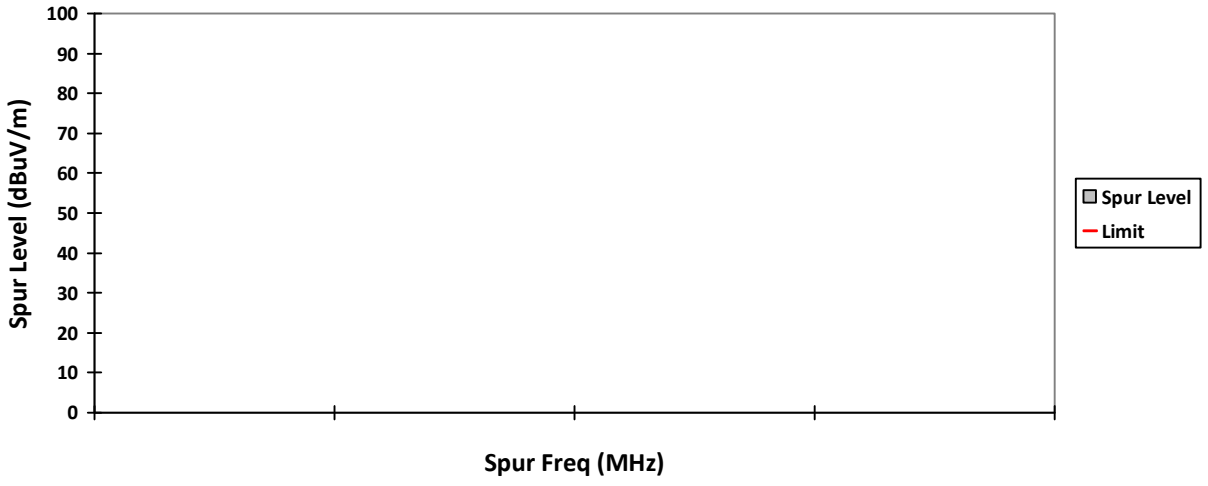
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10480	-	58.2366**	-	-	68.2	-	-	9.9634 **	-	-
15720	-	59.2653**	38.18**	-	74.0	54.0	-	14.7347 **	15.82 **	-
20960	-	40.5678**	-	-	74.0	-	-	33.4322 **	-	-
26200	-	44.1497**	-	-	68.2	-	-	24.0503 **	-	-
31440	-	47.3145**	-	-	74.0	-	-	26.6855 **	-	-
36680	-	48.3117**	-	-	68.2	-	-	19.8883 **	-	-
Horizontal Radiated Emission Result										
10480	-	57.6449**	-	-	68.2	-	-	10.5551 **	-	-
15720	-	60.7154**	38.12**	-	74.0	54.0	-	13.2846 **	15.88 **	-
20960	-	41.6533**	-	-	74.0	-	-	32.3467 **	-	-
26200	-	45.0373**	-	-	68.2	-	-	23.1627 **	-	-
31440	-	46.3520**	-	-	74.0	-	-	27.648 **	-	-
36680	-	49.1914**	-	-	68.2	-	-	19.0086 **	-	-

Remarks: Pass Result	Marginal Result	Fail Result

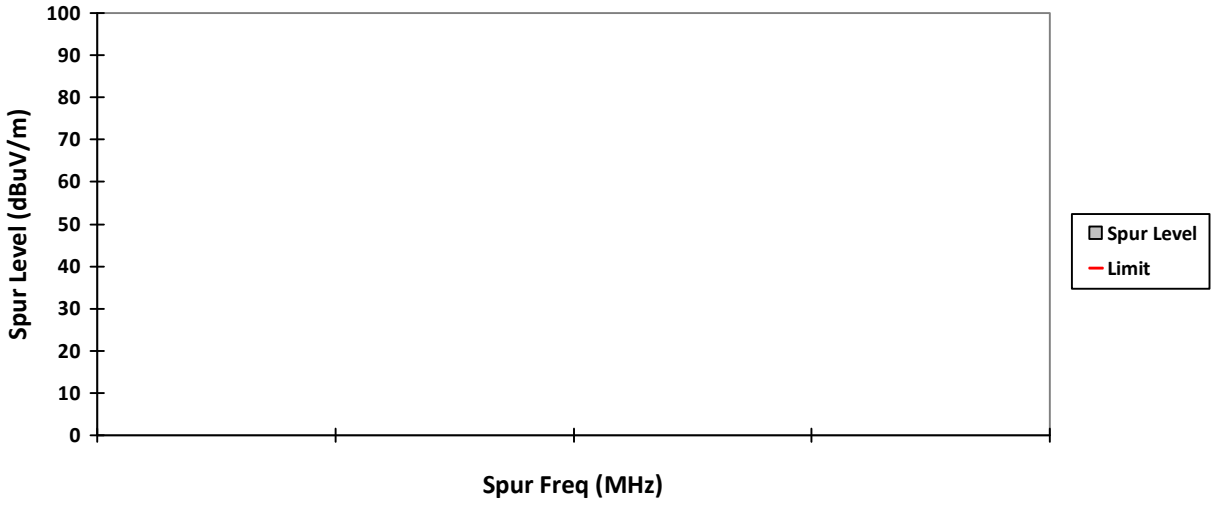
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Fri, 6 Aug, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

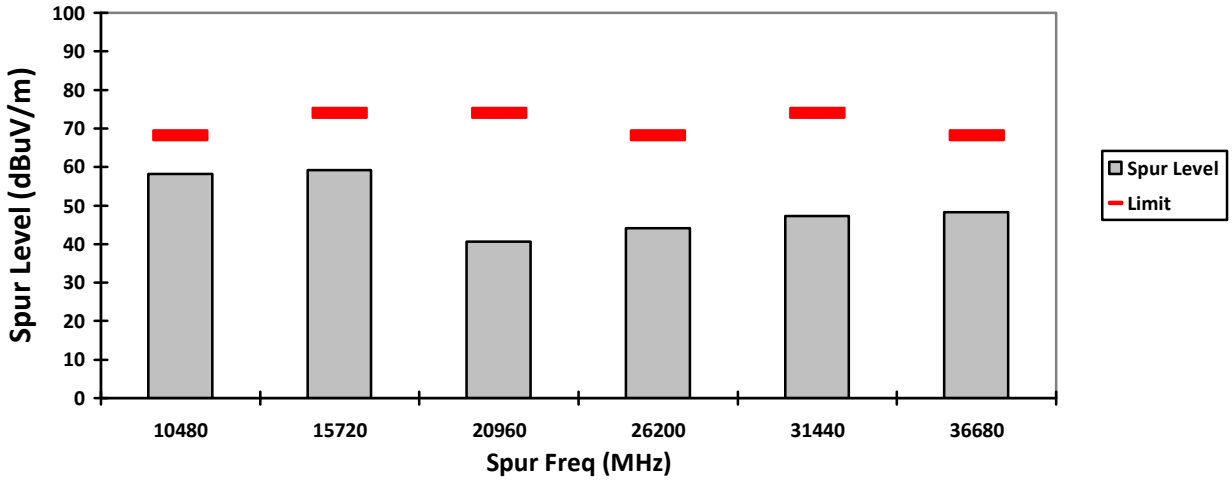
VERTICAL, QPK



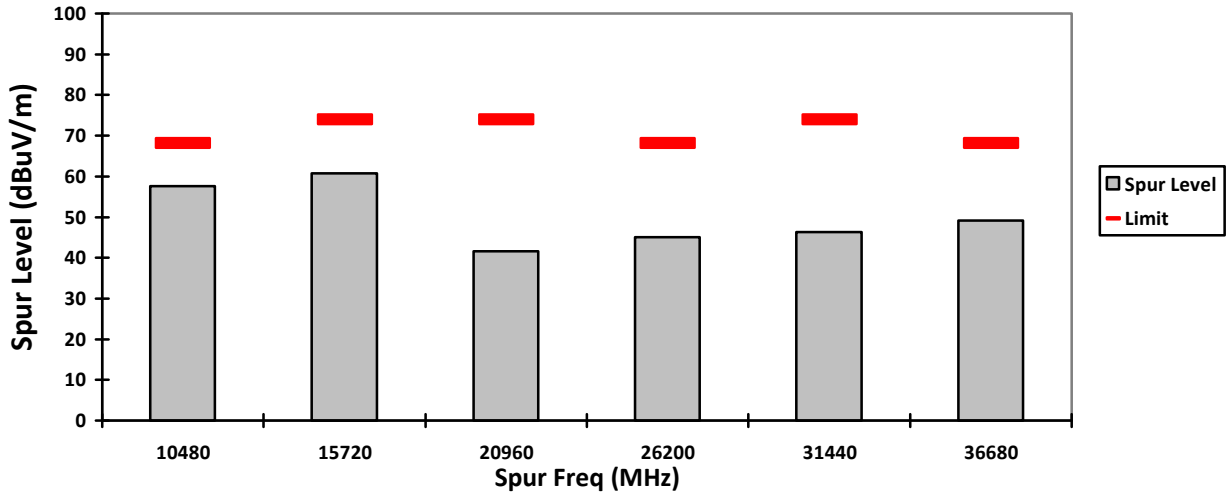
HORIZONTAL, QPK

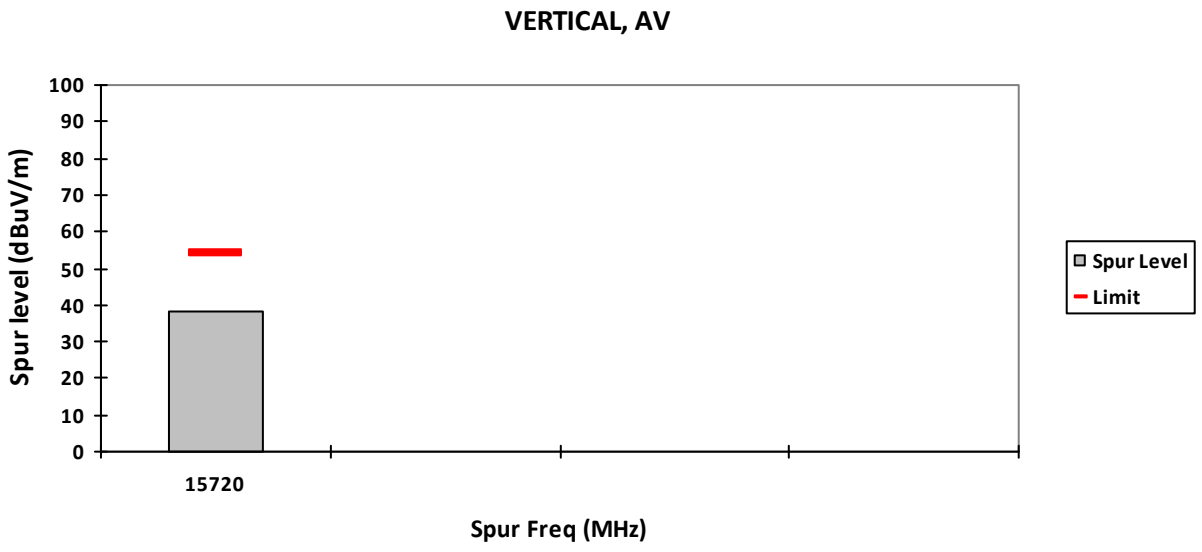


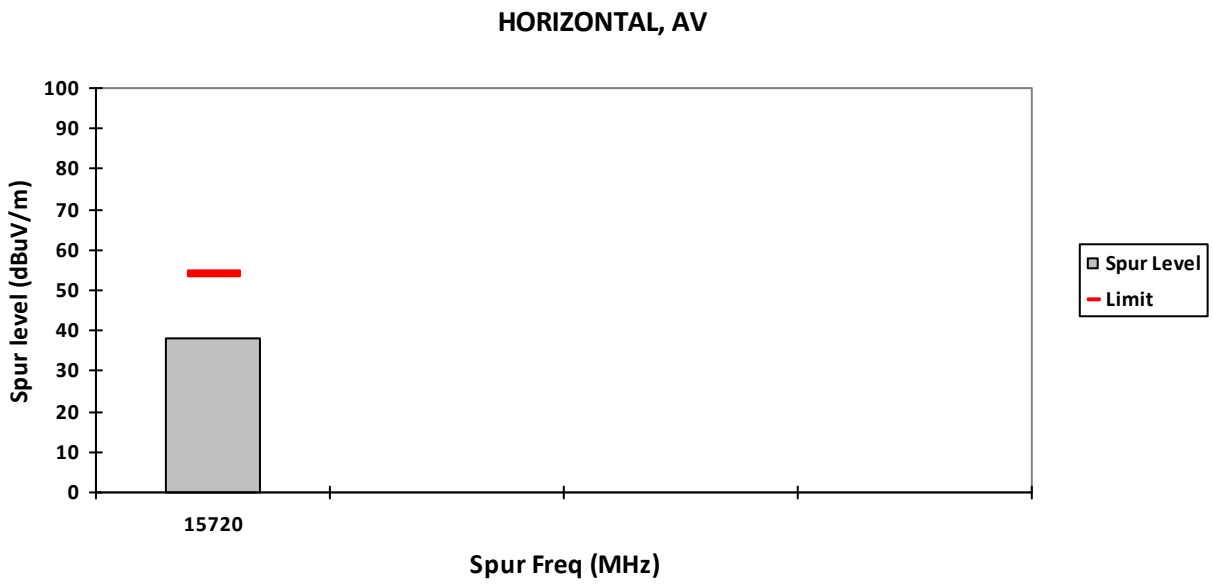
VERTICAL, PK



HORIZONTAL, PK




VERTICAL, AV
Spur level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
15720
Spur Freq (MHz)
Spur Level
Limit


HORIZONTAL, AV
Spur level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
15720
Spur Freq (MHz)
Spur Level
Limit

Test: WIFI SAC Transmitter Radiated Emission
Model#: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: Low Test Frequency: 5260.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11n 20MHz)

Radiated Emission (Low Channel) tabular data

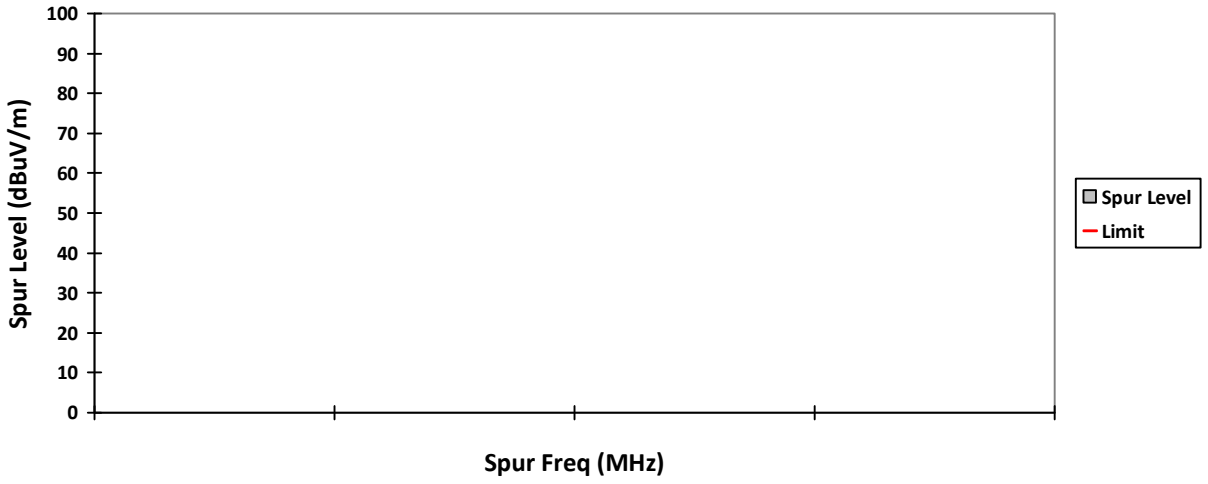
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10520	-	57.6544**	-	-	68.2	-	-	10.5456 **	-	-
15780	-	60.1776**	38.45**	-	74.0	54.0	-	13.8224 **	15.55 **	-
21040	-	41.0234**	-	-	74.0	-	-	32.9766 **	-	-
26300	-	45.4203**	-	-	68.2	-	-	22.7797 **	-	-
31560	-	46.3378**	-	-	74.0	-	-	27.6622 **	-	-
36820	-	48.6305**	-	-	68.2	-	-	19.5695 **	-	-
Horizontal Radiated Emission Result										
10520	-	58.4760**	-	-	68.2	-	-	9.724 **	-	-
15780	-	57.6818**	38.56**	-	74.0	54.0	-	16.3182 **	15.44 **	-
21040	-	40.6622**	-	-	74.0	-	-	33.3378 **	-	-
26300	-	45.1150**	-	-	68.2	-	-	23.085 **	-	-
31560	-	46.5783**	-	-	74.0	-	-	27.4217 **	-	-
36820	-	47.0513**	-	-	68.2	-	-	21.1487 **	-	-

Remarks: Pass Result	Marginal Result	Fail Result

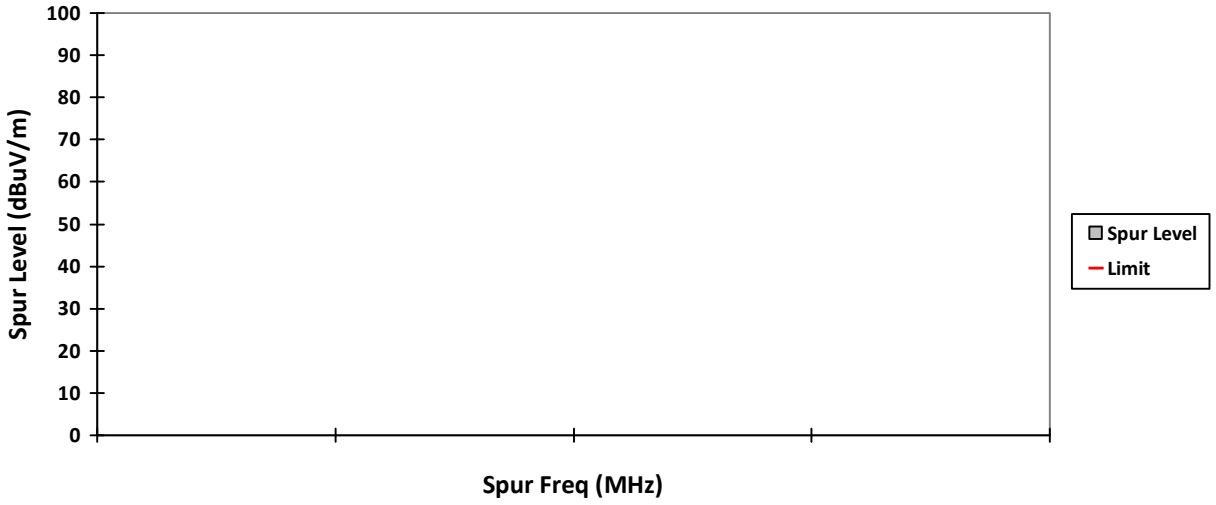
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Fri, 6 Aug, 2021** **System MU: 4.03dB**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

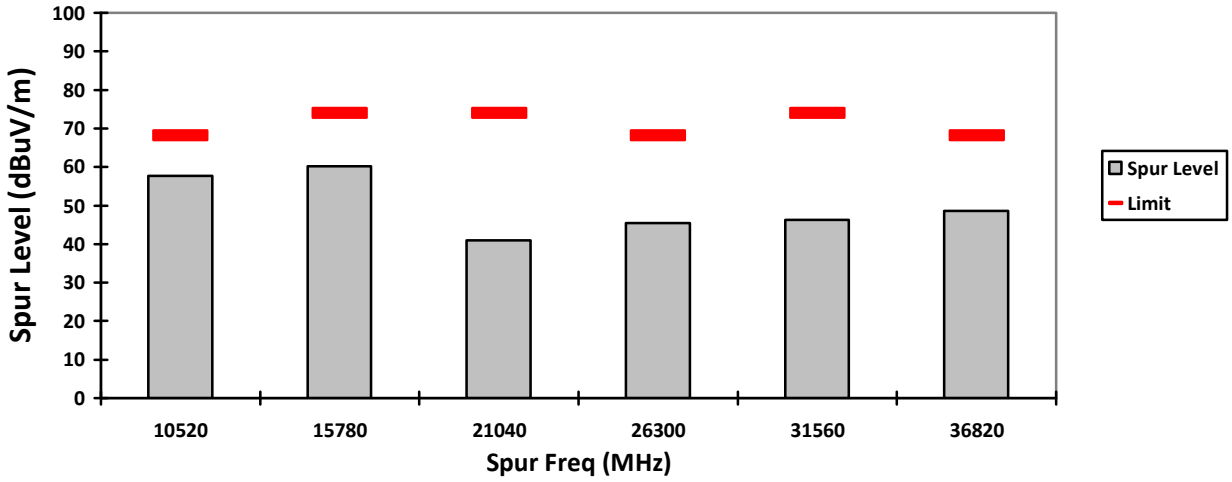
VERTICAL, QPK



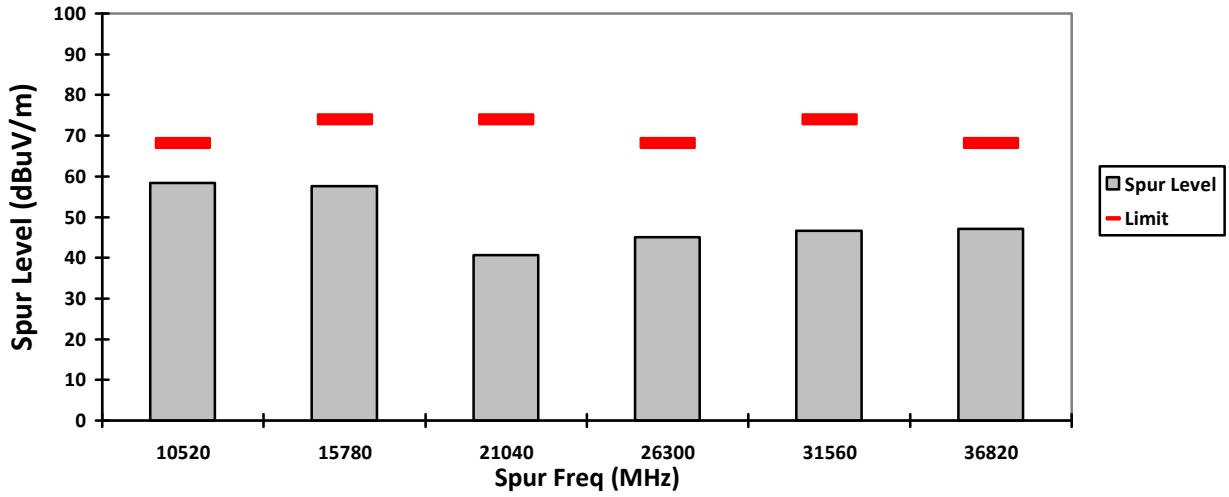
HORIZONTAL, QPK

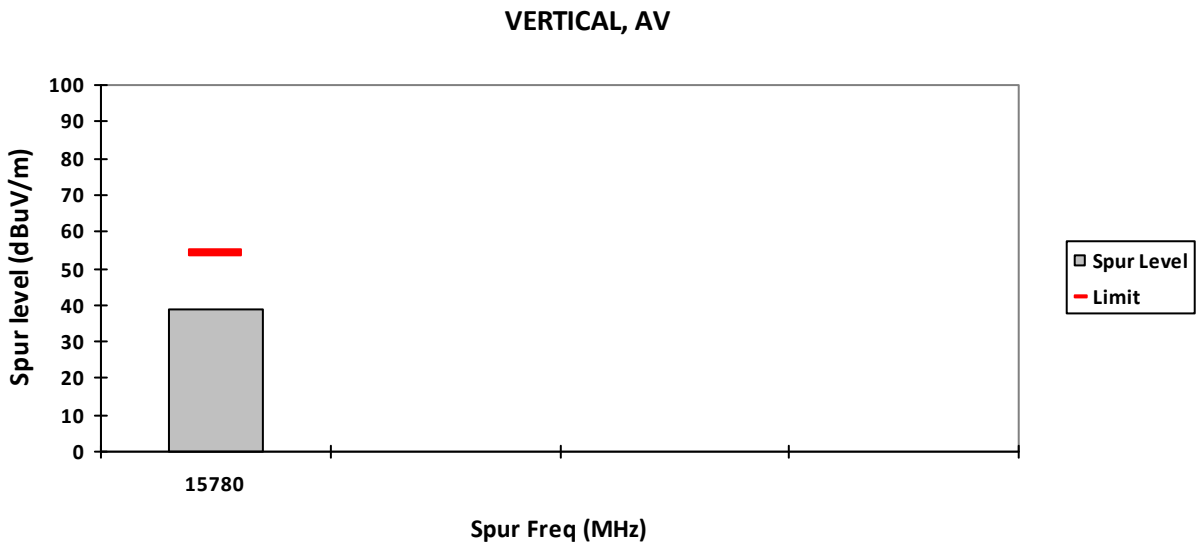


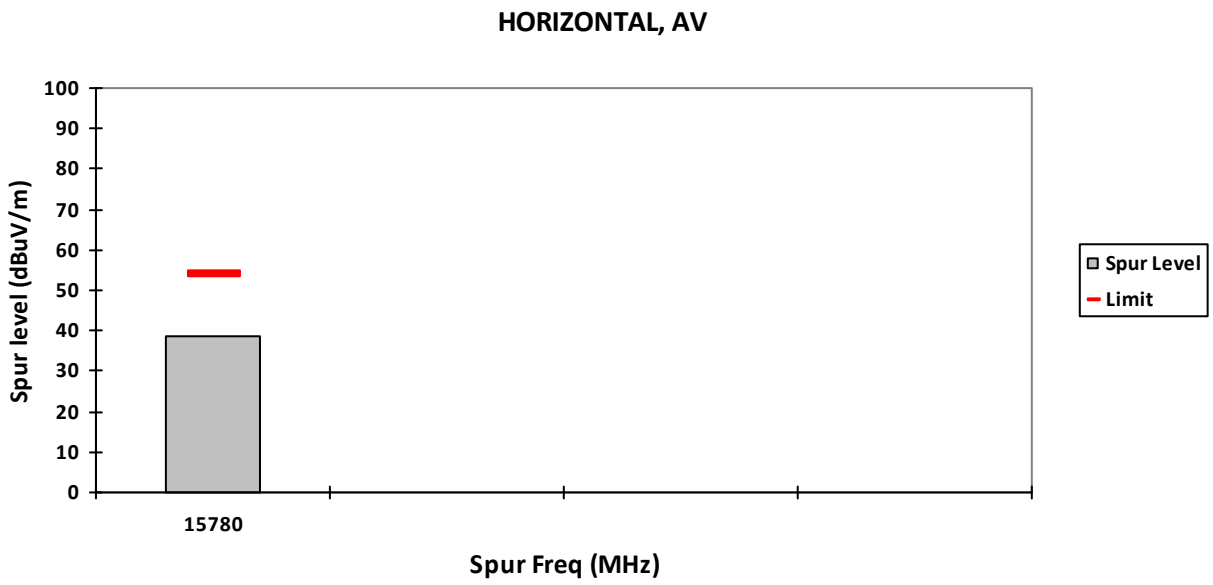
VERTICAL, PK



HORIZONTAL, PK




VERTICAL, AV
Spur level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
15780
Spur Freq (MHz)
Spur Level
Limit


HORIZONTAL, AV
Spur level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
15780
Spur Freq (MHz)
Spur Level
Limit

Test: WIFI SAC Transmitter Radiated Emission
Model#: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: Mid Test Frequency: 5300.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11n 20MHz)

Radiated Emission (Mid Channel) tabular data

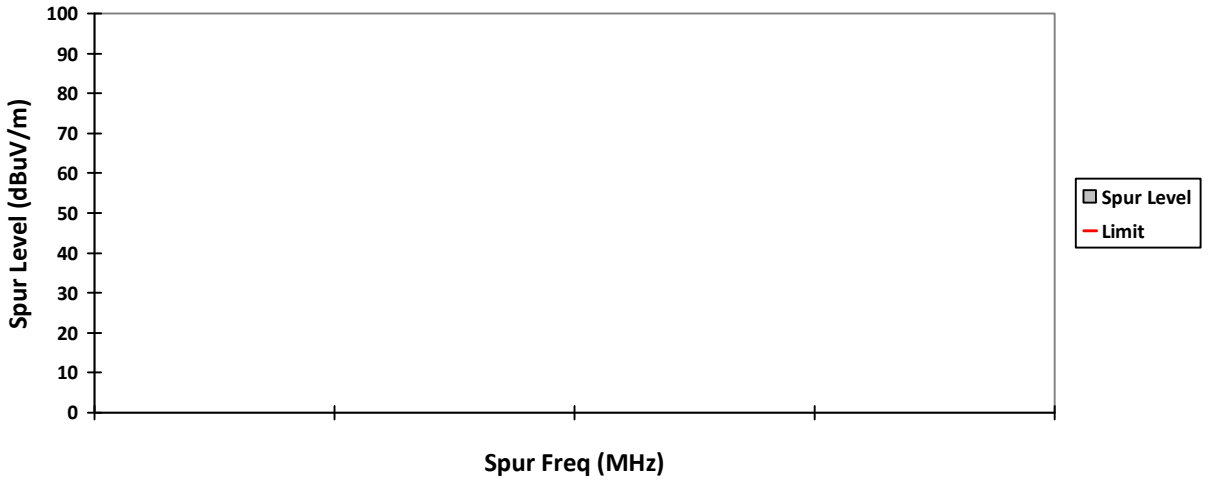
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10600	-	57.9636**	36.04**	-	74.0	54.0	-	16.0364 **	17.96 **	-
15900	-	60.2052**	38.9**	-	74.0	54.0	-	13.7948 **	15.1 **	-
21200	-	41.9489**	-	-	74.0	-	-	32.0511 **	-	-
26500	-	45.1842**	-	-	68.2	-	-	23.0158 **	-	-
31800	-	45.7077**	-	-	74.0	-	-	28.2923 **	-	-
37100	-	49.3963**	-	-	68.2	-	-	18.8037 **	-	-
Horizontal Radiated Emission Result										
10600	-	59.2558**	35.97**	-	74.0	54.0	-	14.7442 **	18.03 **	-
15900	-	60.0637**	38.86**	-	74.0	54.0	-	13.9363 **	15.14 **	-
21200	-	41.5209**	-	-	74.0	-	-	32.4791 **	-	-
26500	-	46.2259**	-	-	68.2	-	-	21.9741 **	-	-
31800	-	45.4309**	-	-	74.0	-	-	28.5691 **	-	-
37100	-	48.7206**	-	-	68.2	-	-	19.4794 **	-	-

Remarks: Pass Result	Marginal Result	Fail Result

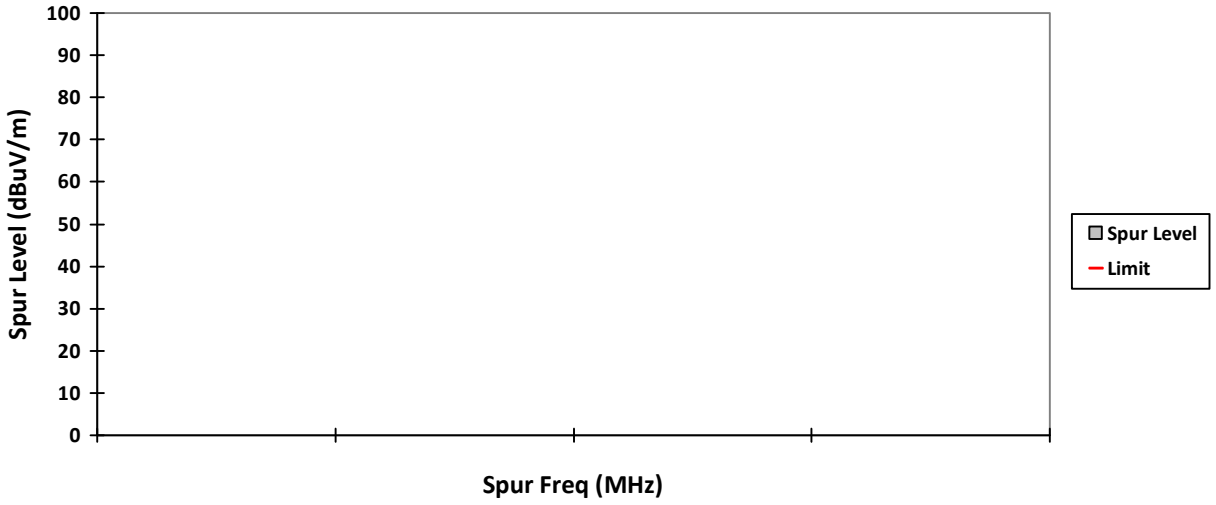
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Fri, 6 Aug, 2021** **System MU: 4.03dB**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

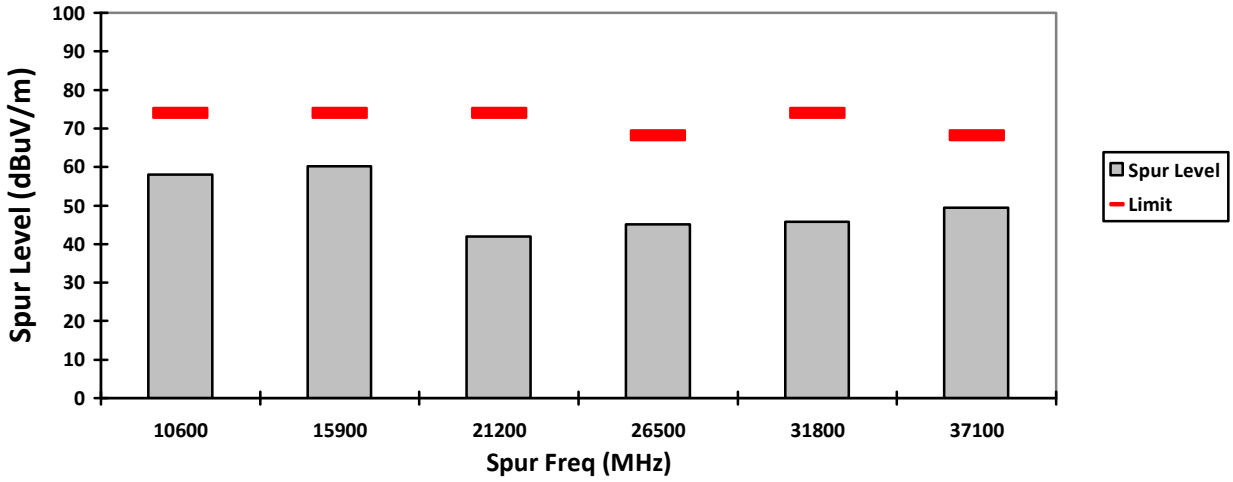
VERTICAL, QPK



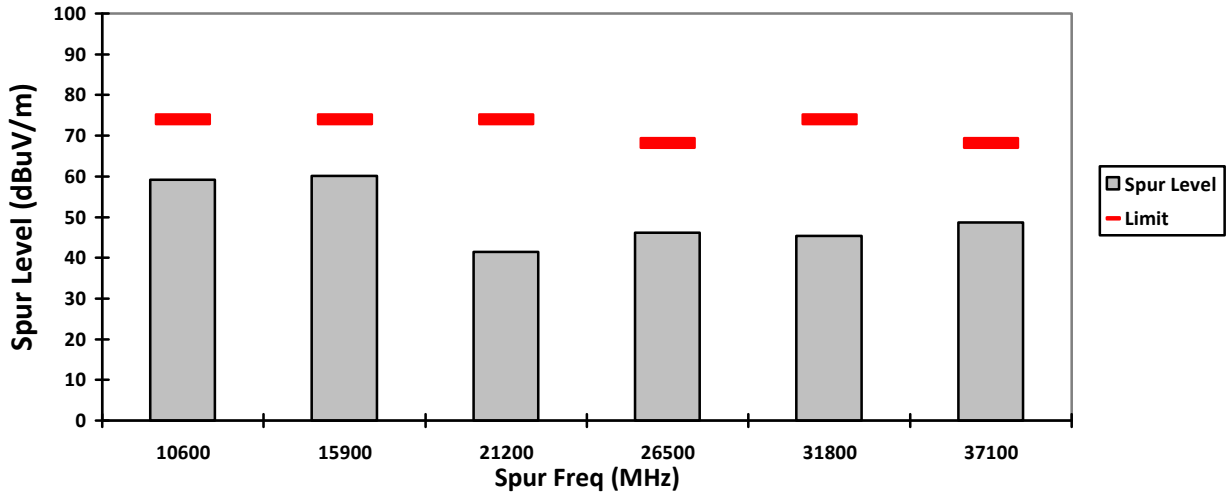
HORIZONTAL, QPK

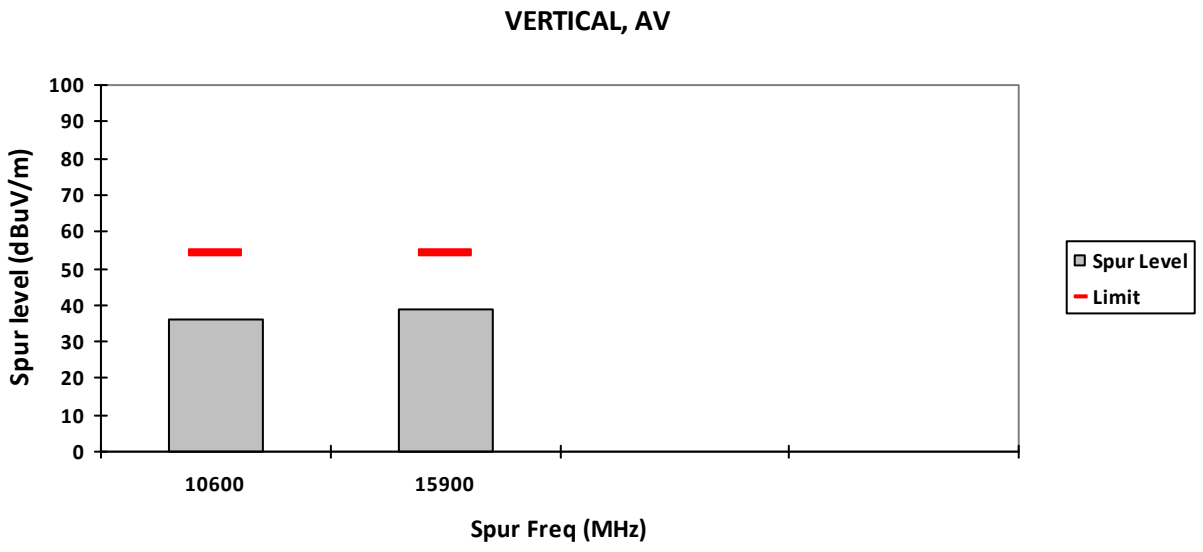


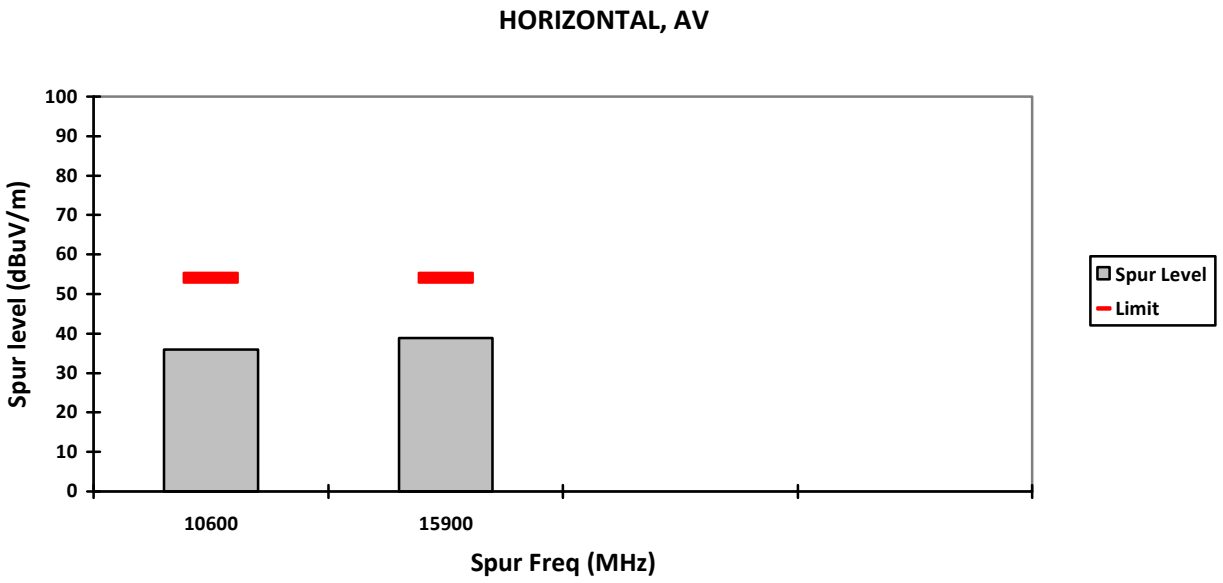
VERTICAL, PK



HORIZONTAL, PK




VERTICAL, AV
Spur level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
10600
15900
Spur Freq (MHz)
Spur Level
Limit


HORIZONTAL, AV
Spur level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
10600
15900
Spur Freq (MHz)
Spur Level
Limit

Test: WIFI SAC Transmitter Radiated Emission
Model#: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: High Test Frequency: 5320.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11n 20MHz)

Radiated Emission (High Channel) tabular data

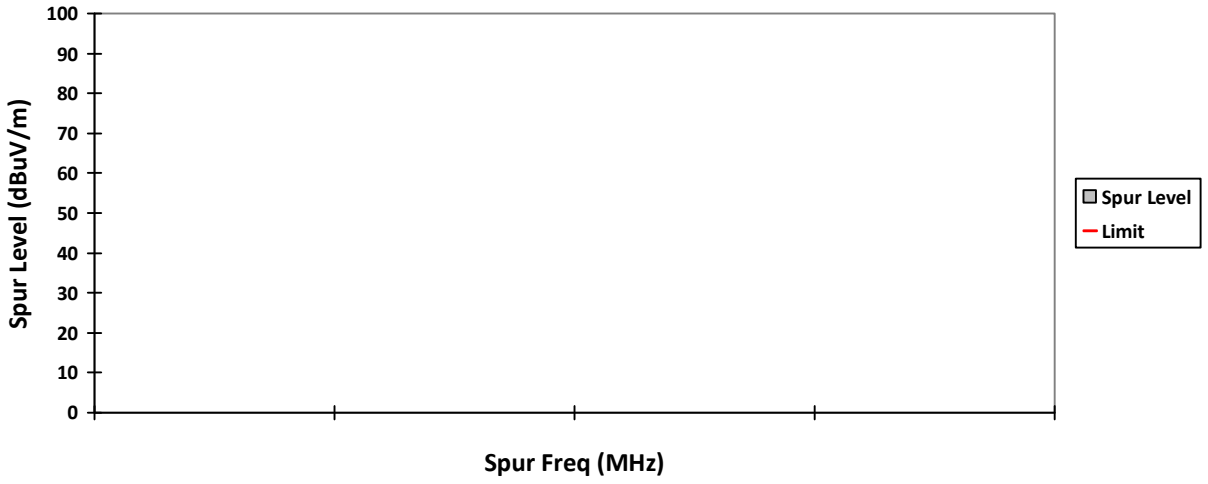
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10640	-	60.0521**	35.92**	-	74.0	54.0	-	13.9479 **	18.08 **	-
15960	-	61.4185**	38.64**	-	74.0	54.0	-	12.5815 **	15.36 **	-
21280	-	43.8814**	-	-	74.0	-	-	30.1186 **	-	-
26600	-	43.5013**	-	-	68.2	-	-	24.6987 **	-	-
31920	-	45.9506**	-	-	68.2	-	-	22.2494 **	-	-
37240	-	48.4557**	-	-	68.2	-	-	19.7443 **	-	-
Horizontal Radiated Emission Result										
10640	-	59.0201**	35.83**	-	74.0	54.0	-	14.9799 **	18.17 **	-
15960	-	62.4774**	38.72**	-	74.0	54.0	-	11.5226 **	15.28 **	-
21280	-	44.0244**	-	-	74.0	-	-	29.9756 **	-	-
26600	-	45.1064**	-	-	68.2	-	-	23.0936 **	-	-
31920	-	48.4453**	-	-	68.2	-	-	19.7547 **	-	-
37240	-	48.6452**	-	-	68.2	-	-	19.5548 **	-	-

Remarks: Pass Result	Marginal Result	Fail Result

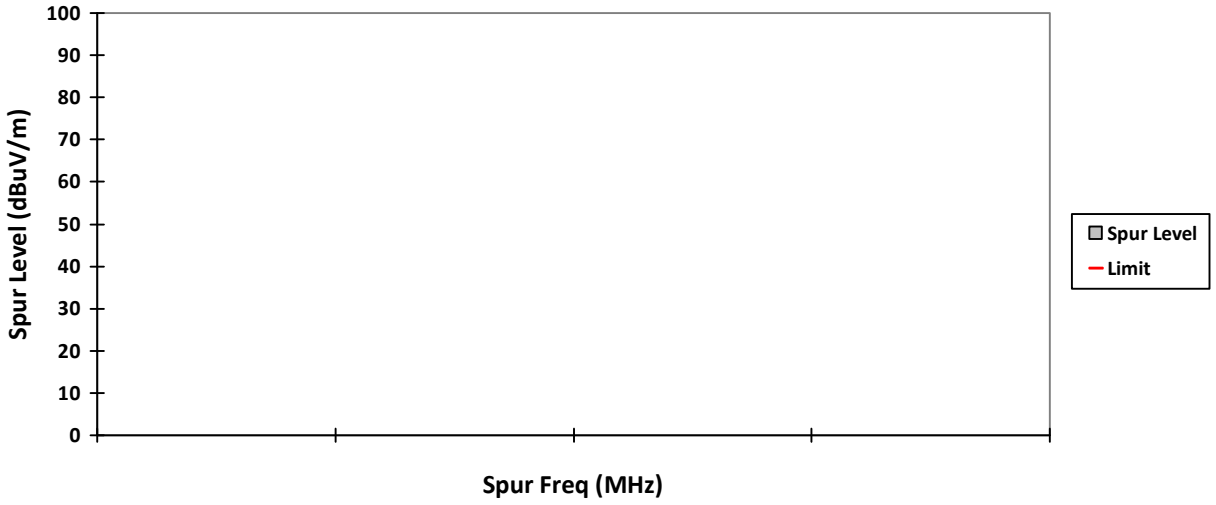
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Fri, 6 Aug, 2021** **System MU: 4.03dB**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

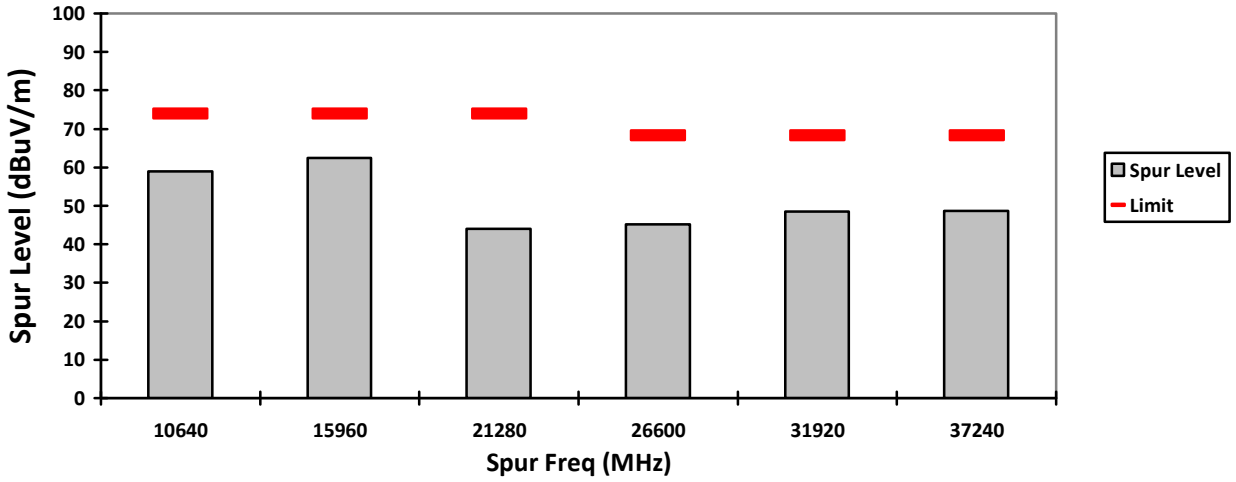
VERTICAL, QPK



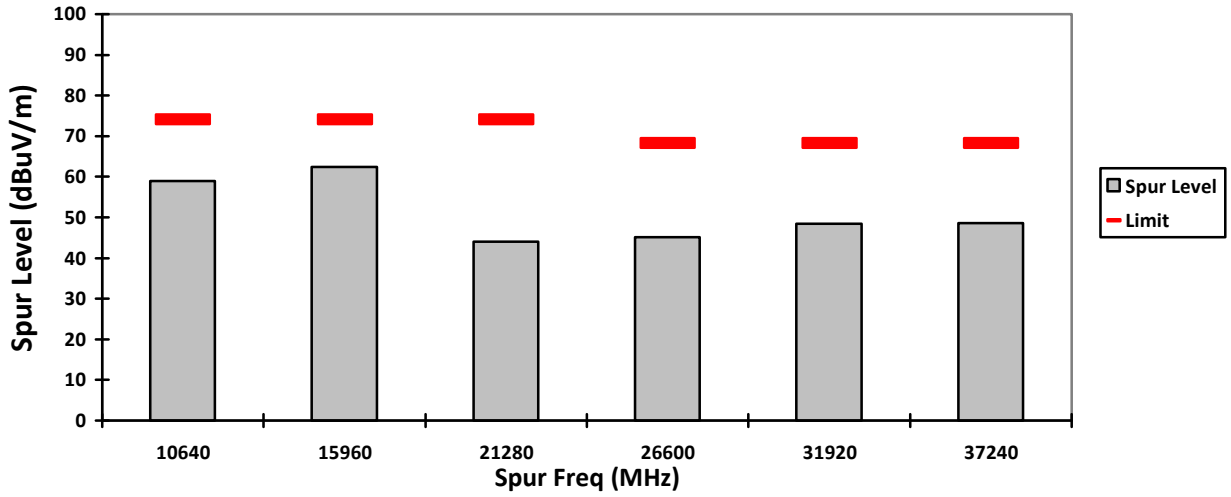
HORIZONTAL, QPK

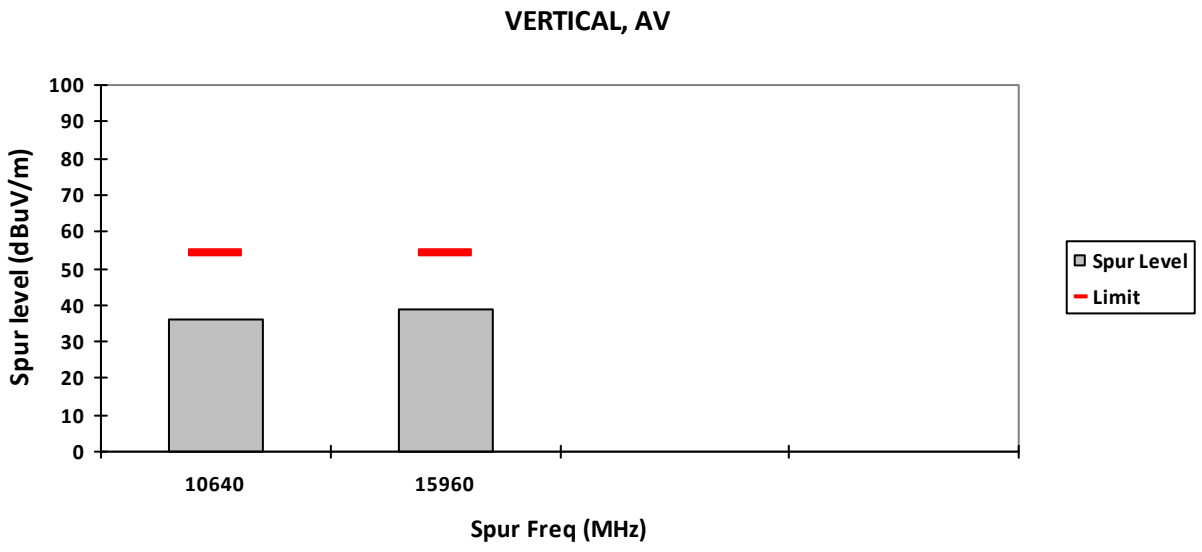


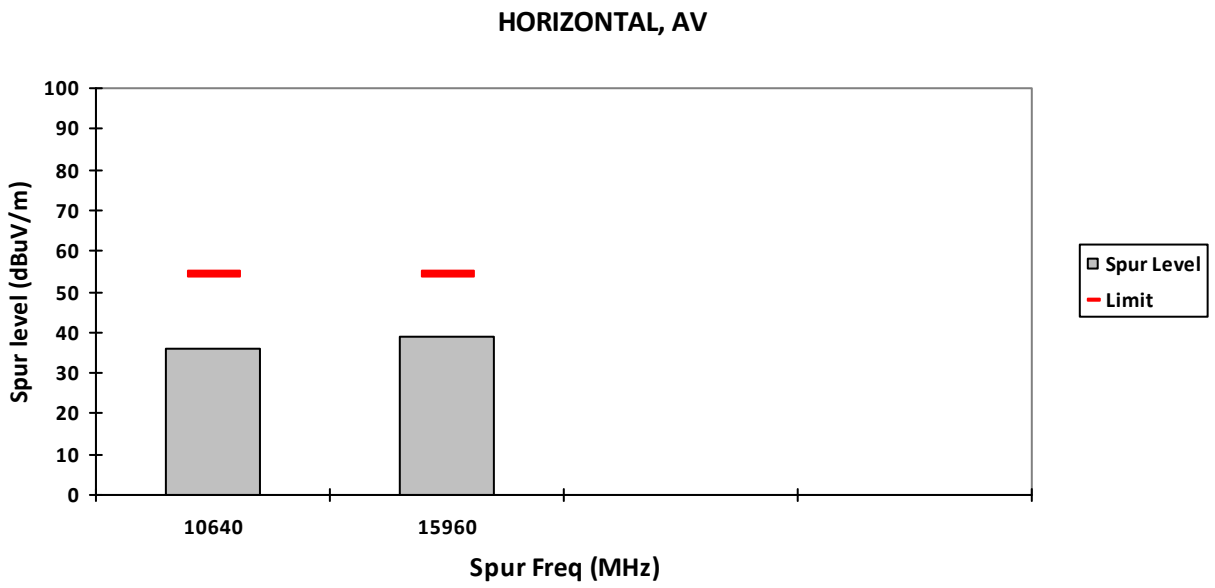
VERTICAL, PK



HORIZONTAL, PK




VERTICAL, AV
Spur level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
10640
15960
Spur Freq (MHz)
Spur Level
Limit


HORIZONTAL, AV
Spur level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
10640
15960
Spur Freq (MHz)
Spur Level
Limit

Test: WIFI SAC Transmitter Radiated Emission
Model#: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: Low Test Frequency: 5500.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11n 20MHz)

Radiated Emission (Low Channel) tabular data

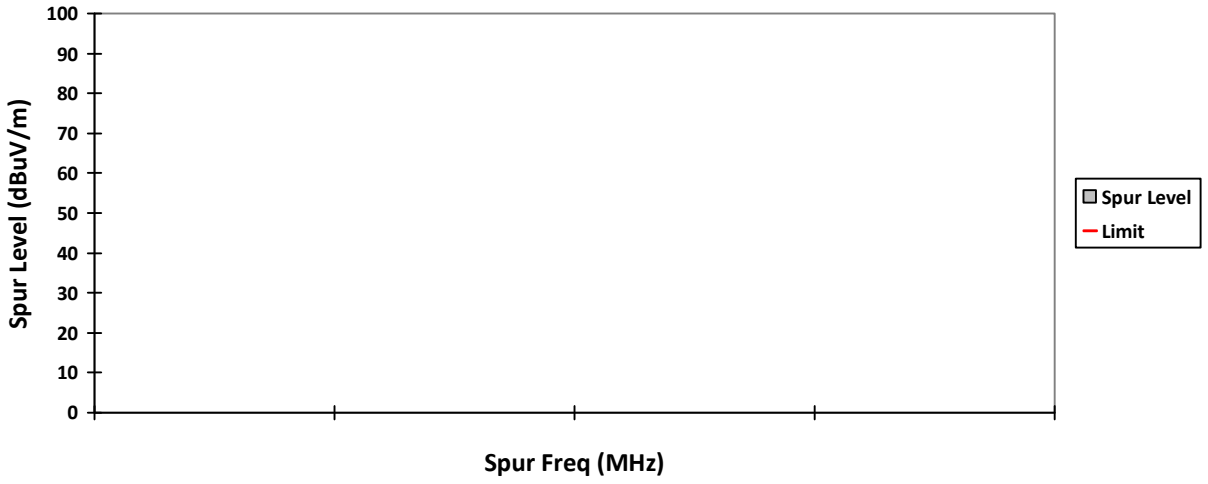
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11000	-	58.0936**	36.44**	-	74.0	54.0	-	15.9064 **	17.56 **	-
16500	-	63.8638**	-	-	68.2	-	-	4.3362 **	-	-
22000	-	43.4281**	-	-	74.0	-	-	30.5719 **	-	-
27500	-	44.8359**	-	-	68.2	-	-	23.3641 **	-	-
33000	-	46.7129**	-	-	68.2	-	-	21.4871 **	-	-
38500	-	49.4744**	-	-	68.2	-	-	18.7256 **	-	-
Horizontal Radiated Emission Result										
11000	-	56.8107**	36.5**	-	74.0	54.0	-	17.1893 **	17.5 **	-
16500	-	63.8375**	-	-	68.2	-	-	4.3625 **	-	-
22000	-	43.8507**	-	-	74.0	-	-	30.1493 **	-	-
27500	-	44.2090**	-	-	68.2	-	-	23.991 **	-	-
33000	-	45.4643**	-	-	68.2	-	-	22.7357 **	-	-
38500	-	50.3126**	-	-	68.2	-	-	17.8874 **	-	-

Remarks: Pass Result	Marginal Result	Fail Result

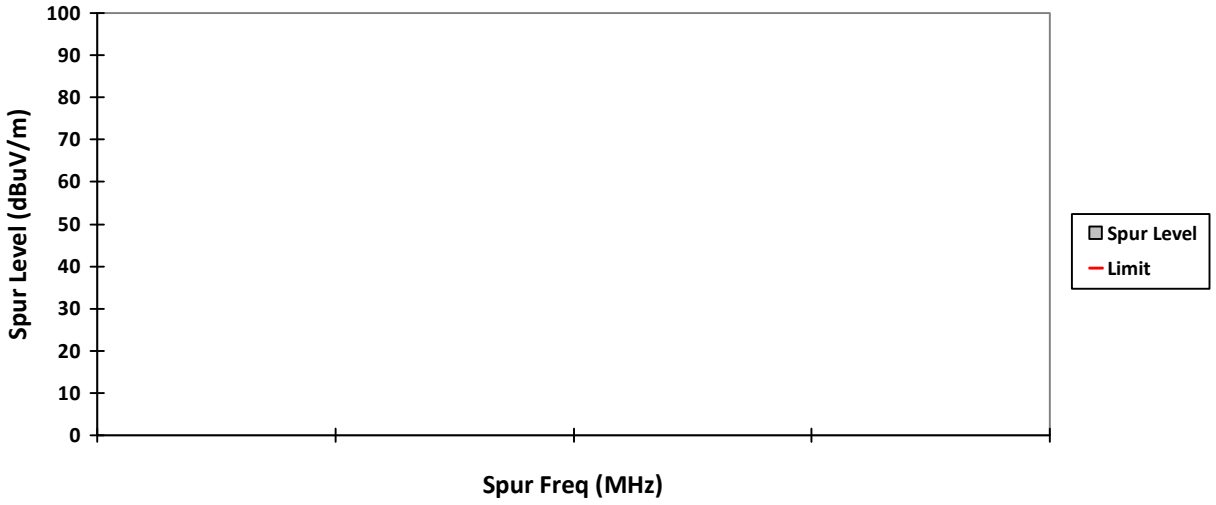
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Fri, 6 Aug, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

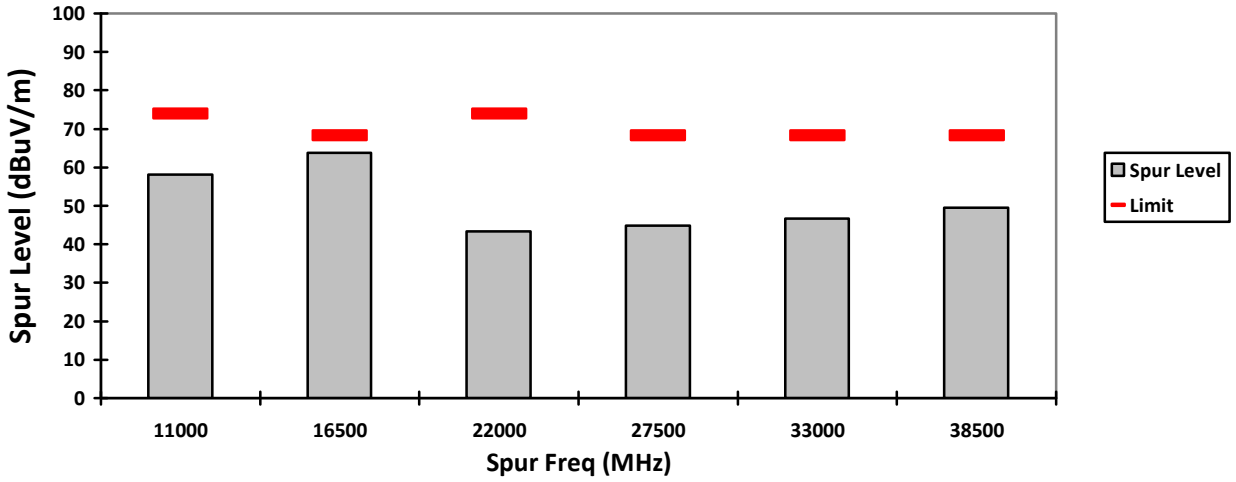
VERTICAL, QPK



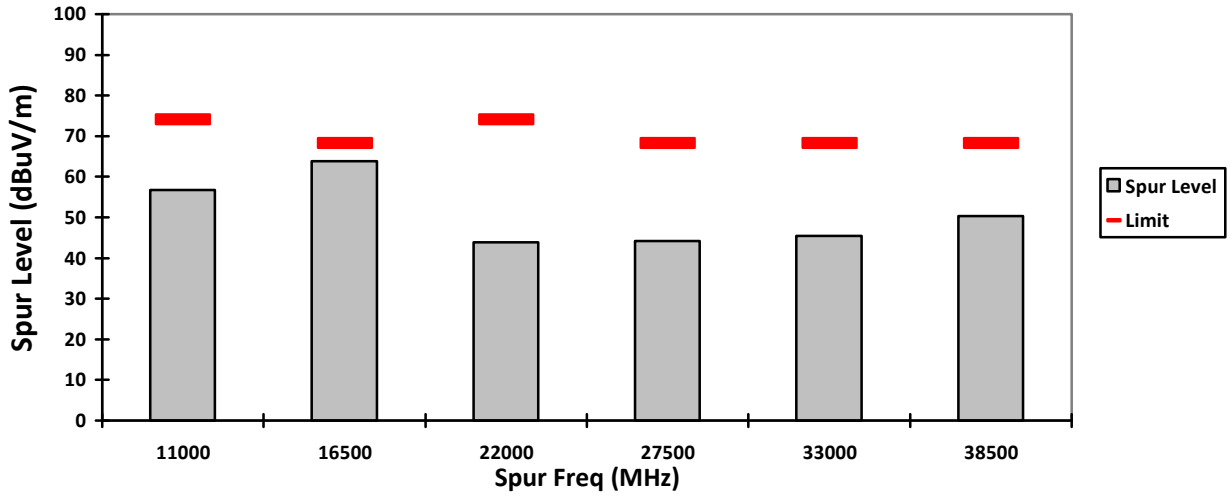
HORIZONTAL, QPK



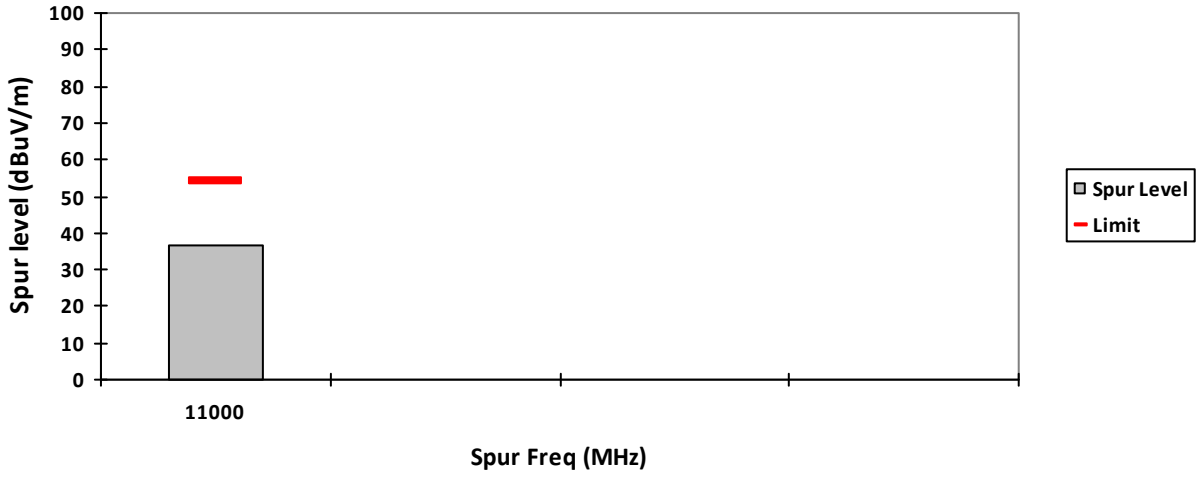
VERTICAL, PK



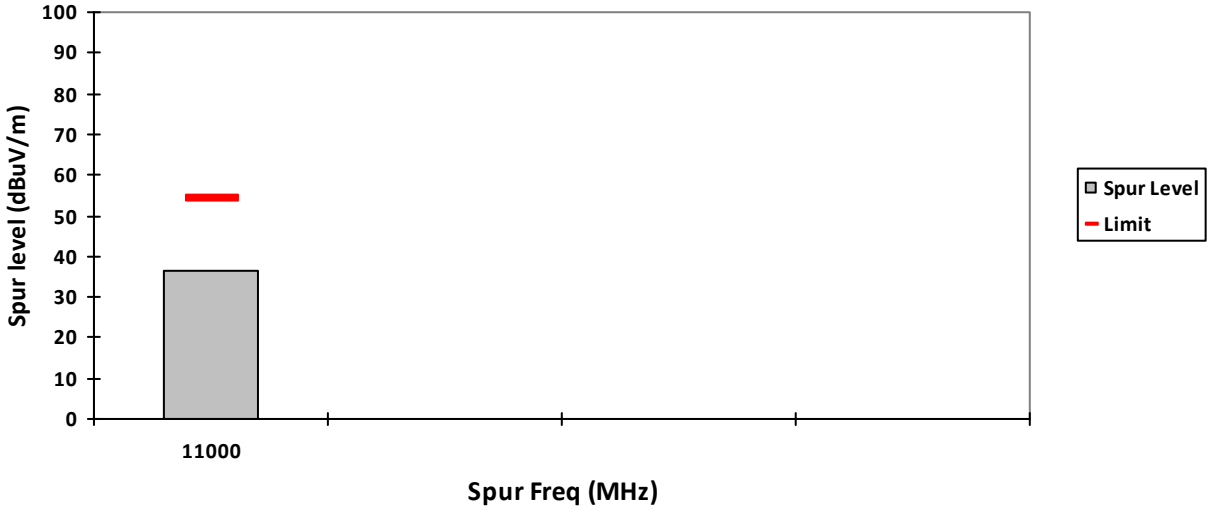
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: Mid Test Frequency: 5580.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11n 20MHz)

Radiated Emission (Mid Channel) tabular data

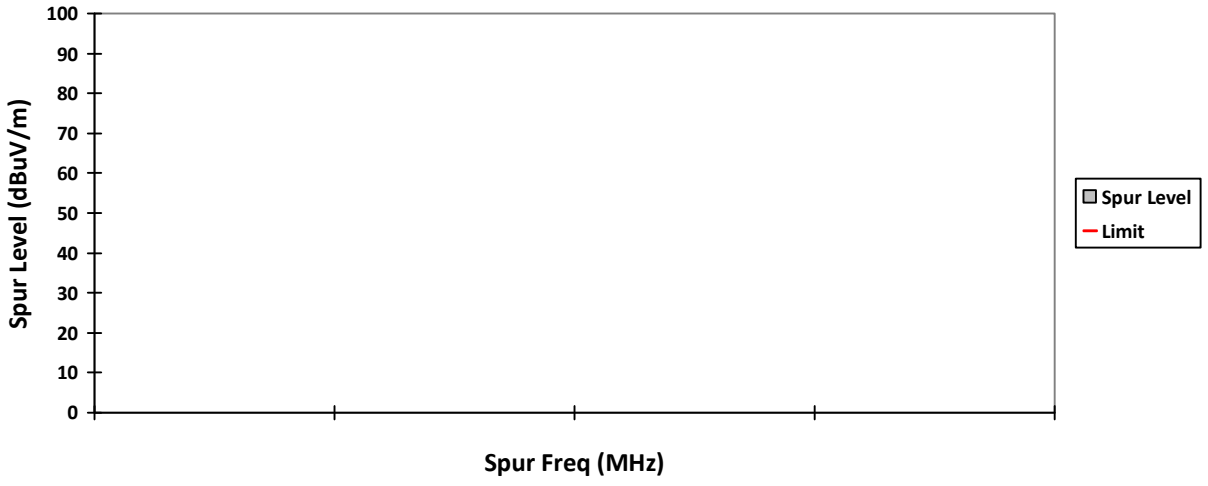
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11160	-	57.4419**	36.72**	-	74.0	54.0	-	16.5581 **	17.28 **	-
16740	-	64.2256**	-	-	68.2	-	-	3.9744 **	-	-
22320	-	43.7985**	-	-	74.0	-	-	30.2015 **	-	-
27900	-	44.8302**	-	-	68.2	-	-	23.3698 **	-	-
33480	-	46.2431**	-	-	68.2	-	-	21.9569 **	-	-
39060	-	52.7676**	-	-	74.0	-	-	21.2324 **	-	-
Horizontal Radiated Emission Result										
11160	-	58.0042**	36.52**	-	74.0	54.0	-	15.9958 **	17.48 **	-
16740	-	63.5451**	-	-	68.2	-	-	4.6549 **	-	-
22320	-	43.4683**	-	-	74.0	-	-	30.5317 **	-	-
27900	-	44.2634**	-	-	68.2	-	-	23.9366 **	-	-
33480	-	47.6859**	-	-	68.2	-	-	20.5141 **	-	-
39060	-	51.6798**	-	-	74.0	-	-	22.3202 **	-	-

Remarks: Pass Result	Marginal Result	Fail Result

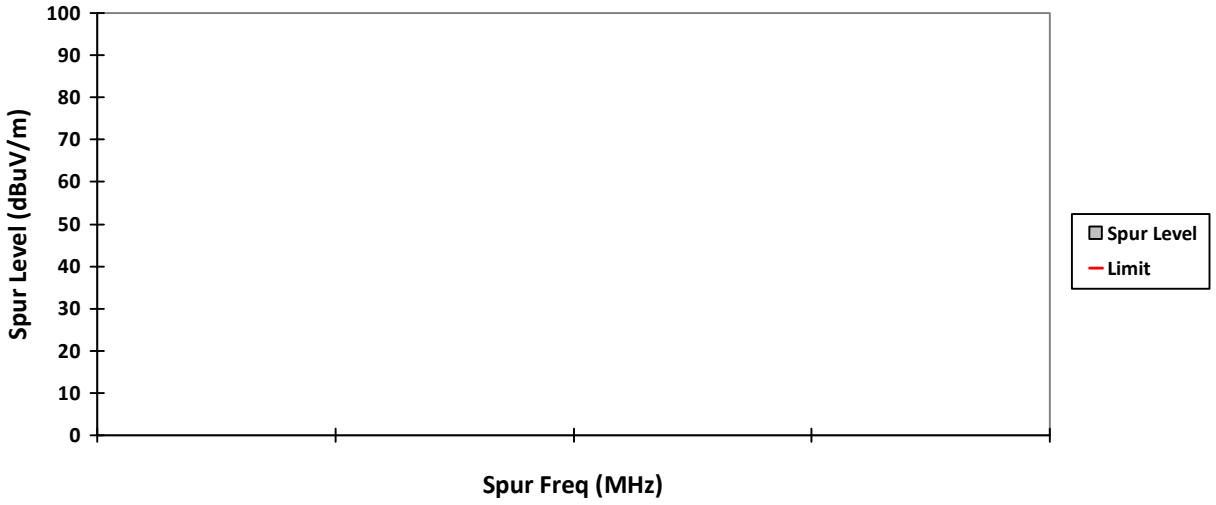
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Fri, 6 Aug, 2021** **System MU: 4.03dB**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

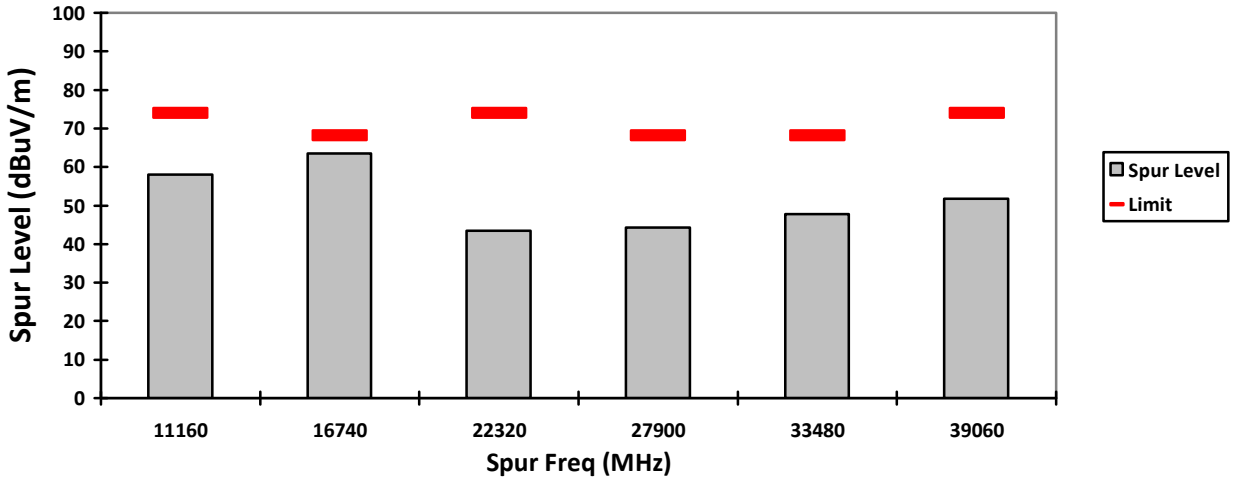
VERTICAL, QPK



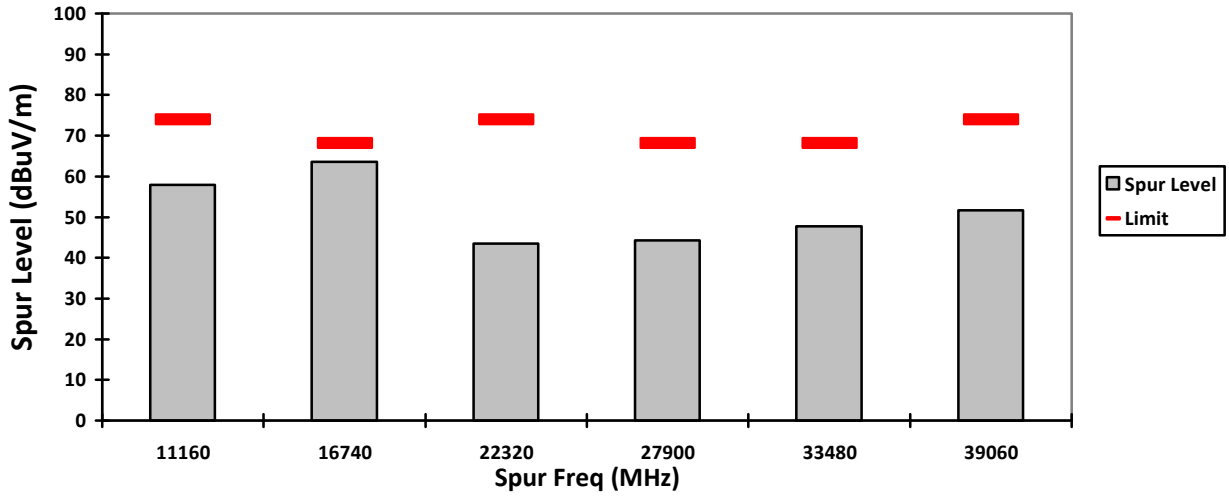
HORIZONTAL, QPK



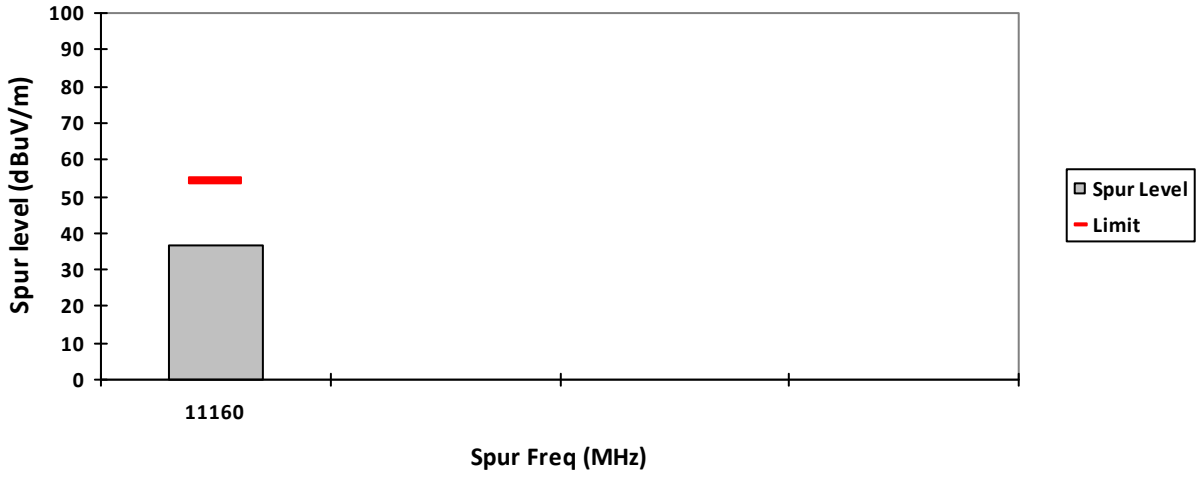
VERTICAL, PK



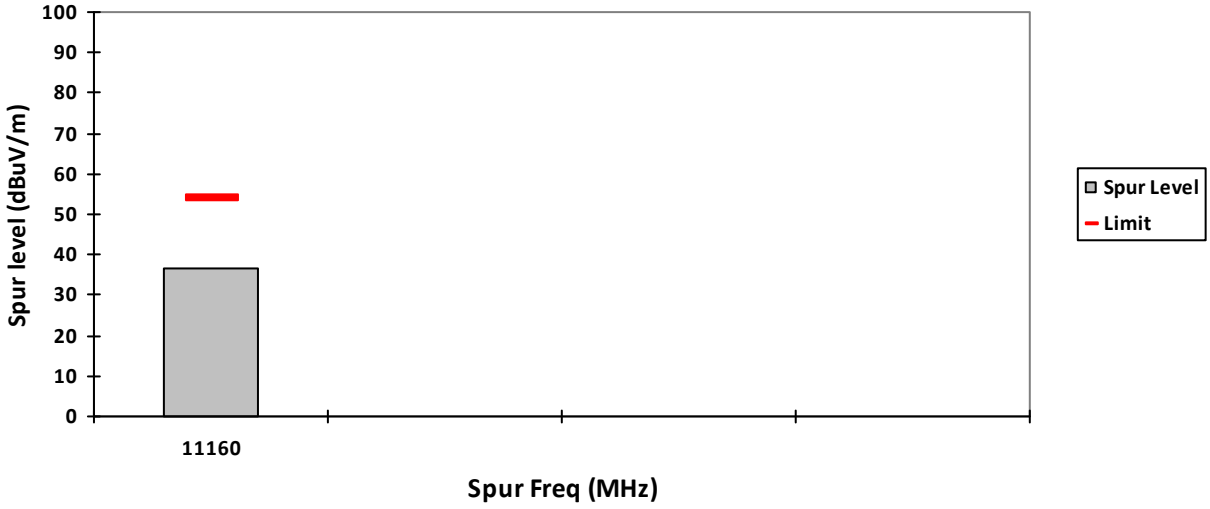
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: Straddle Test Frequency: 5720.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11n 20MHz)

Radiated Emission (Straddle Channel) tabular data

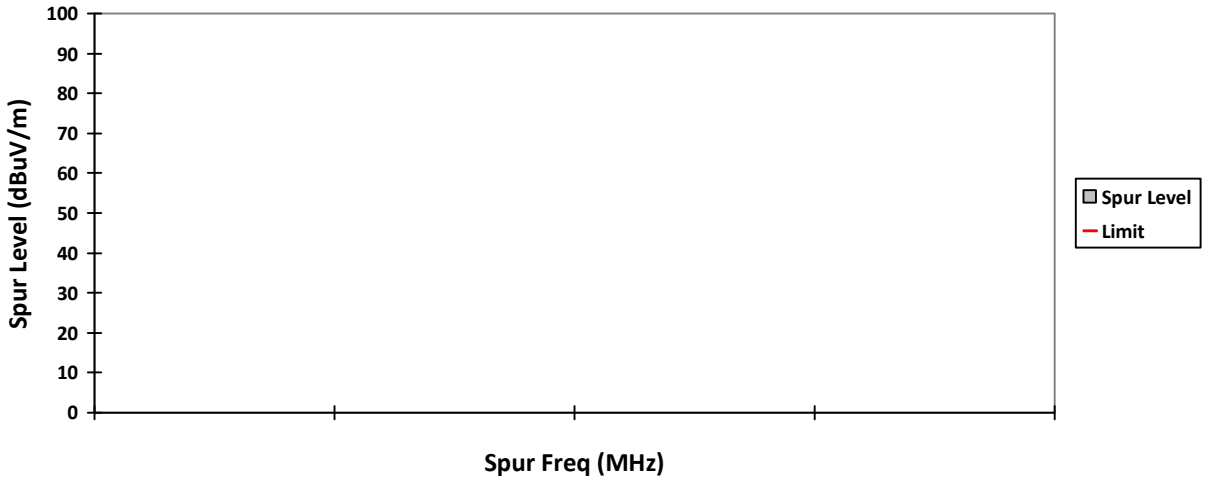
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11440	-	56.8573**	36.1**	-	74.0	54.0	-	17.1427 **	17.9 **	-
17160	-	65.9726**	-	-	68.2	-	-	2.2274 **	-	-
22880	-	42.6437**	-	-	74.0	-	-	31.3563 **	-	-
28600	-	44.8926**	-	-	68.2	-	-	23.3074 **	-	-
34320	-	48.0896**	-	-	68.2	-	-	20.1104 **	-	-
Horizontal Radiated Emission Result										
11440	-	58.4338**	36.22**	-	74.0	54.0	-	15.5662 **	17.78 **	-
17160	-	64.1149**	-	-	68.2	-	-	4.0851 **	-	-
22880	-	43.4318**	-	-	74.0	-	-	30.5682 **	-	-
28600	-	46.0913**	-	-	68.2	-	-	22.1087 **	-	-
34320	-	45.4671**	-	-	68.2	-	-	22.7329 **	-	-

Remarks: Pass Result	Marginal Result	Fail Result

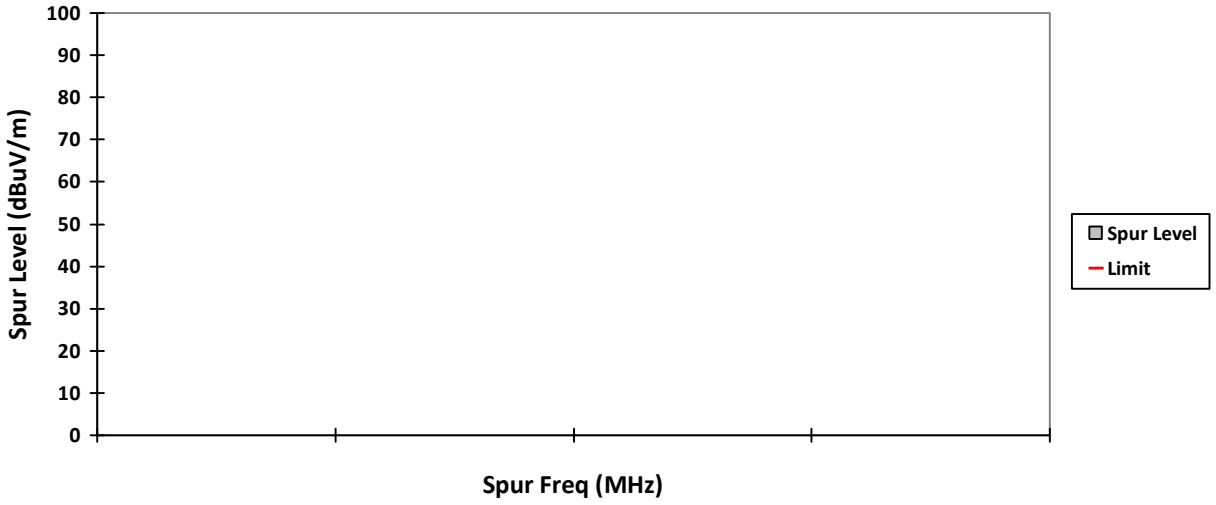
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Fri, 6 Aug, 2021** **System MU: 4.03dB**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

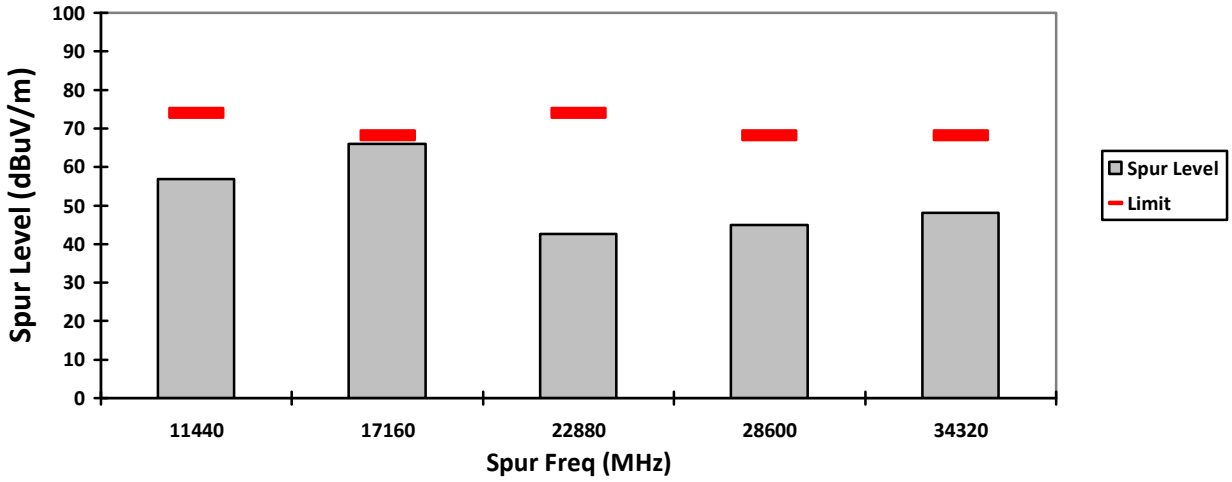
VERTICAL, QPK



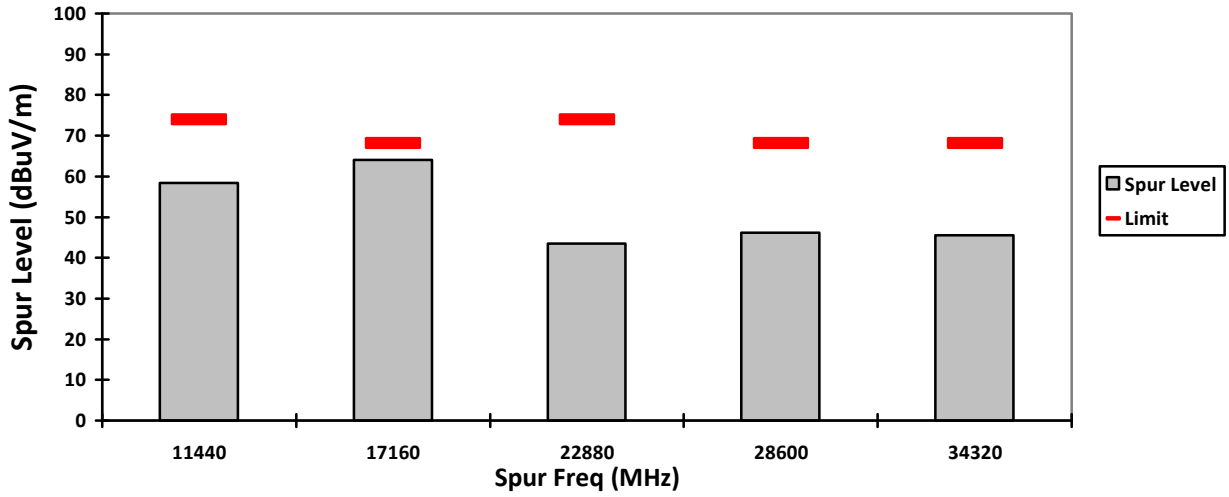
HORIZONTAL, QPK



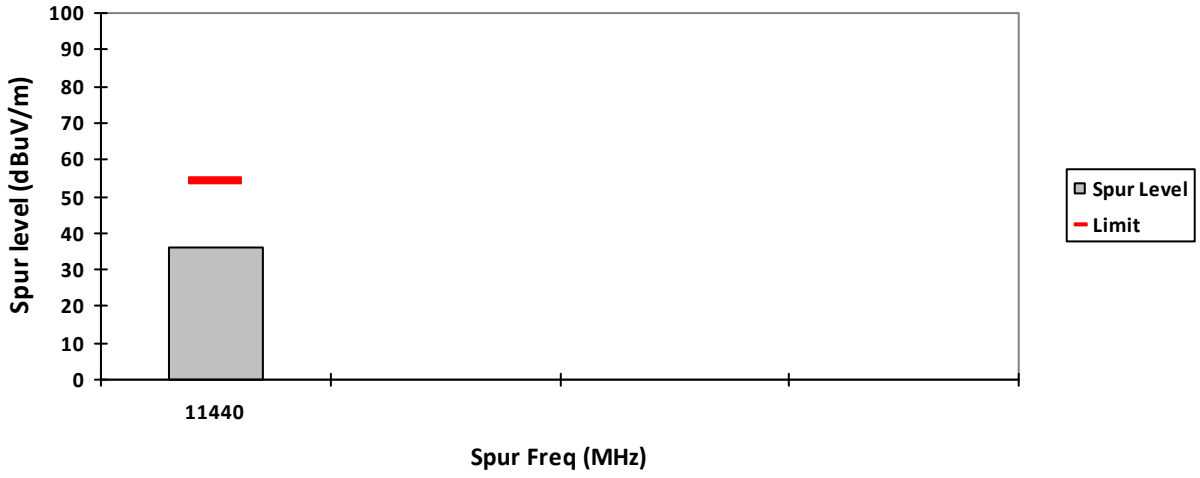
VERTICAL, PK



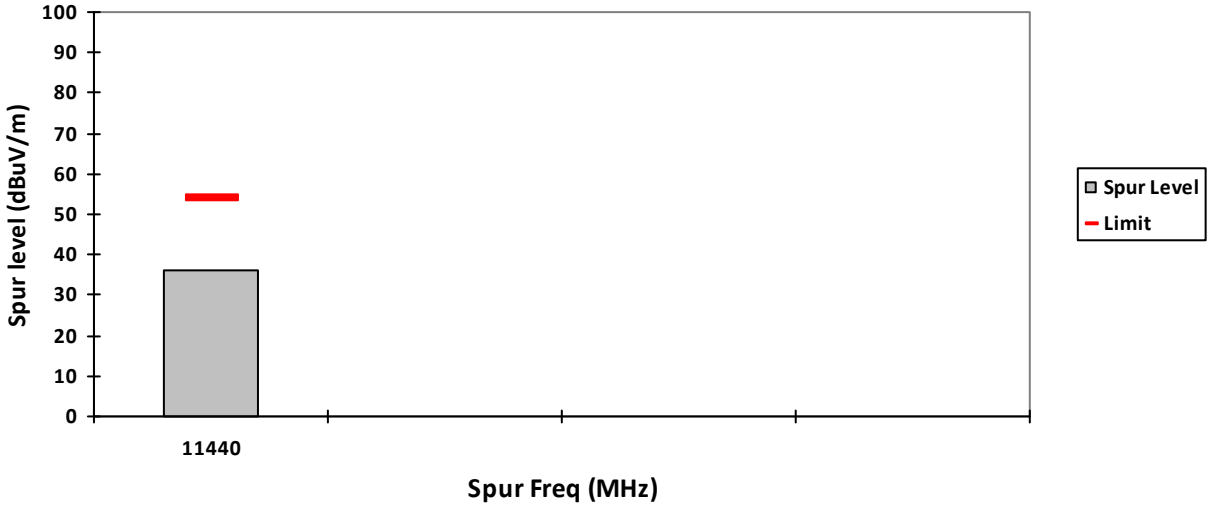
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: Low Test Frequency: 5745.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11n 20MHz)

Radiated Emission (Low Channel) tabular data

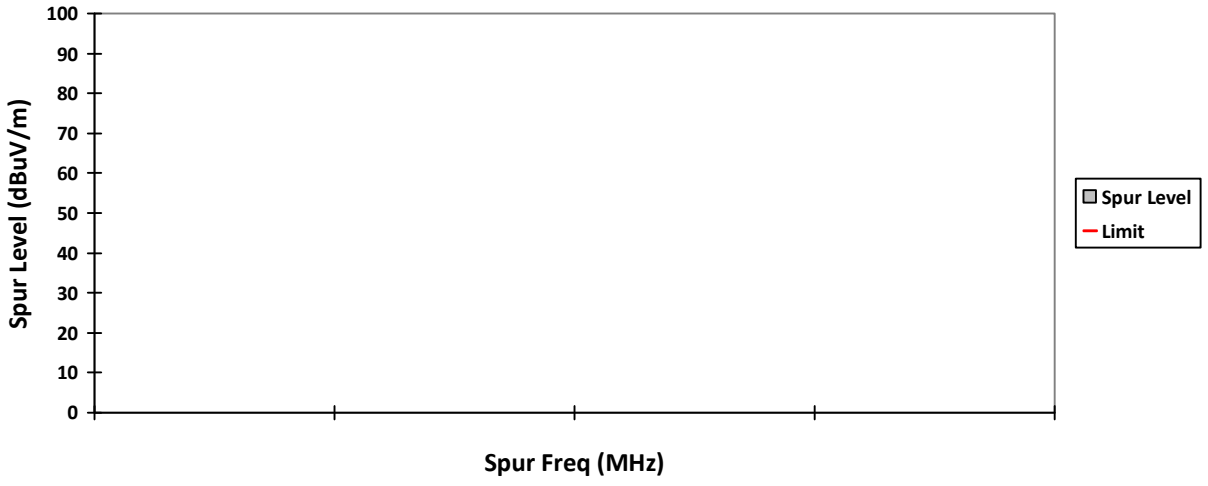
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11490	-	57.6824**	36.55**	-	74.0	54.0	-	16.3176 **	17.45 **	-
17235	-	66.5412**	-	-	68.2	-	-	1.6588 **	-	-
22980	-	43.6906**	-	-	74.0	-	-	30.3094 **	-	-
28725	-	44.8991**	-	-	68.2	-	-	23.3009 **	-	-
34470	-	46.7369**	-	-	68.2	-	-	21.4631 **	-	-
Horizontal Radiated Emission Result										
11490	-	57.5898**	36.62**	-	74.0	54.0	-	16.4102 **	17.38 **	-
17235	-	64.9063**	-	-	68.2	-	-	3.2937 **	-	-
22980	-	42.3345**	-	-	74.0	-	-	31.6655 **	-	-
28725	-	46.3087**	-	-	68.2	-	-	21.8913 **	-	-
34470	-	47.2018**	-	-	68.2	-	-	20.9982 **	-	-

Remarks: Pass Result	Marginal Result	Fail Result

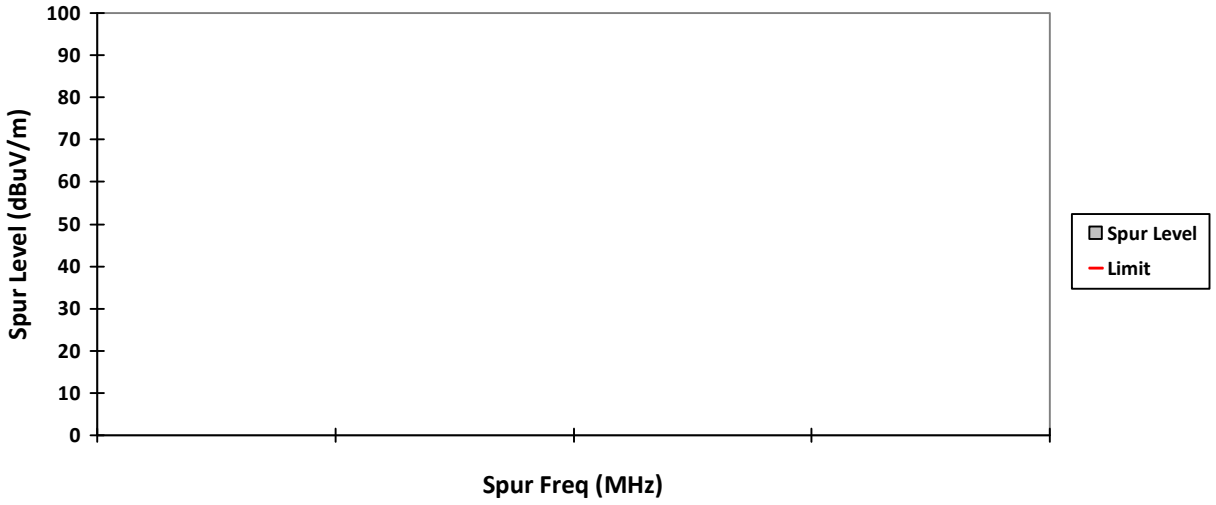
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Fri, 6 Aug, 2021**
System MU: 4.03dB

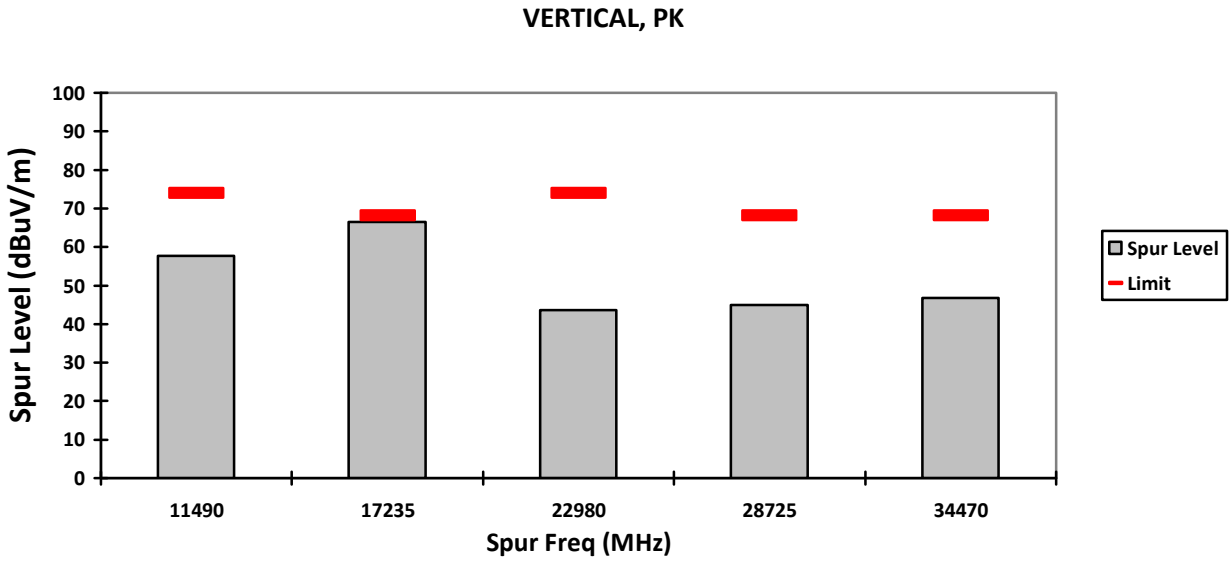
Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

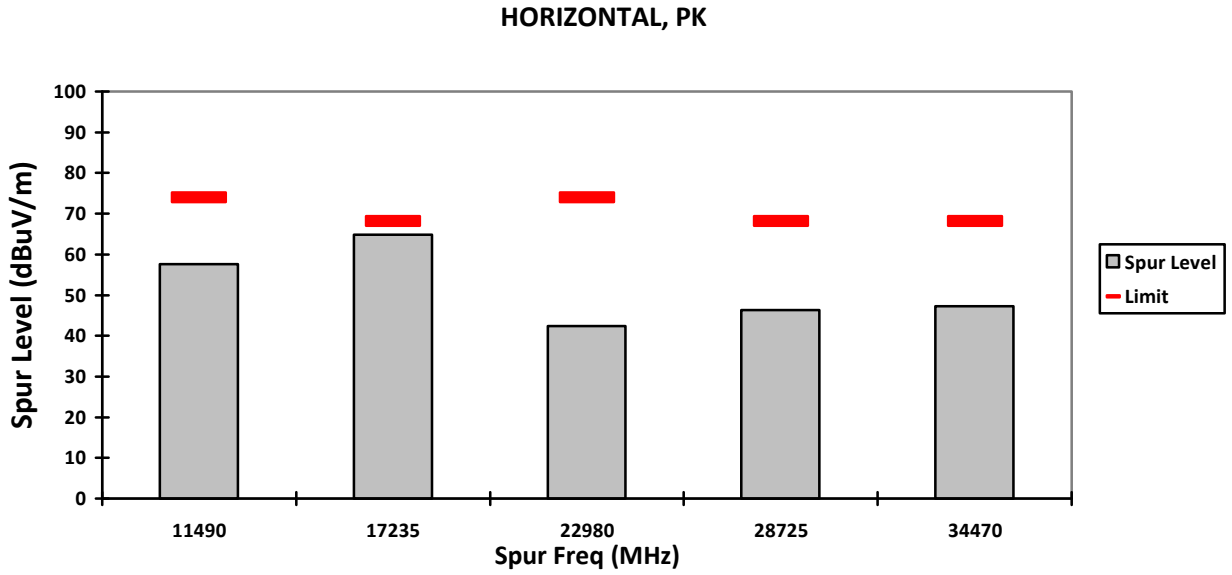
VERTICAL, QPK

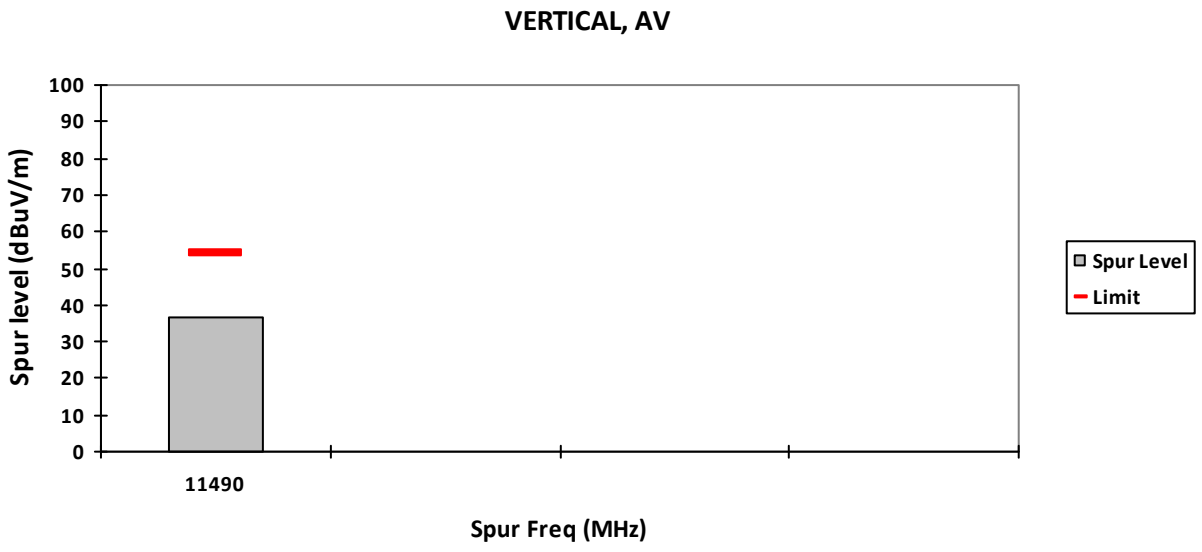


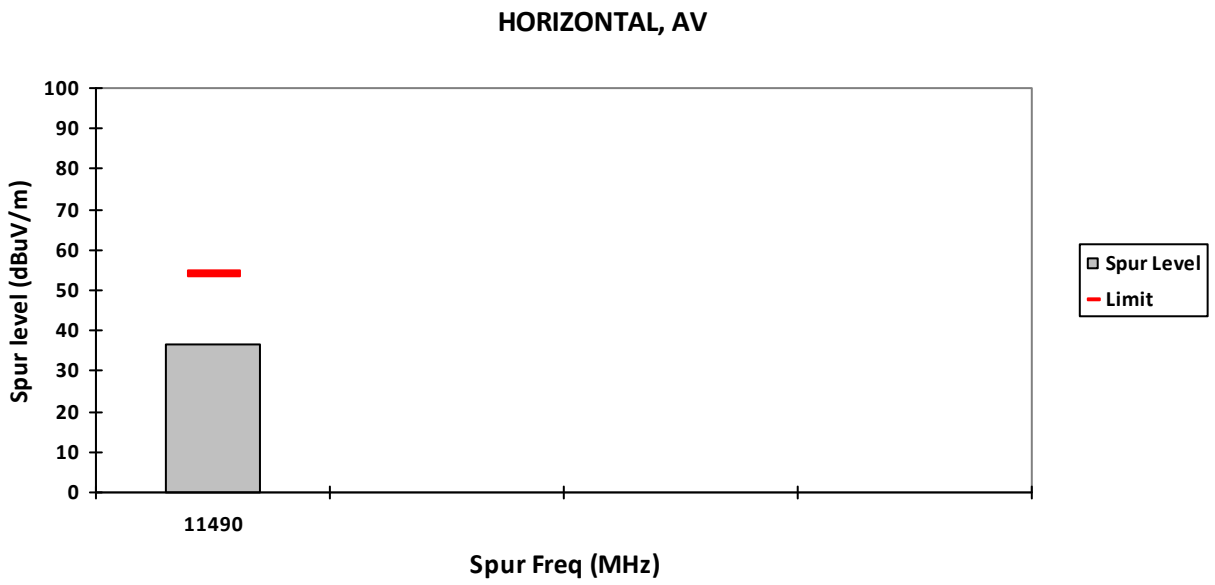
HORIZONTAL, QPK




VERTICAL, PK
Spur Level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
11490
17235
22980
28725
34470
Spur Freq (MHz)
Spur Level
Limit


HORIZONTAL, PK
Spur Level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
11490
17235
22980
28725
34470
Spur Freq (MHz)
Spur Level
Limit


VERTICAL, AV
Spur level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
11490
Spur Freq (MHz)
Spur Level
Limit


HORIZONTAL, AV
Spur level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
11490
Spur Freq (MHz)
Spur Level
Limit

Test: WIFI SAC Transmitter Radiated Emission
Model#: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: Mid Test Frequency: 5785.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11n 20MHz)

Radiated Emission (Mid Channel) tabular data

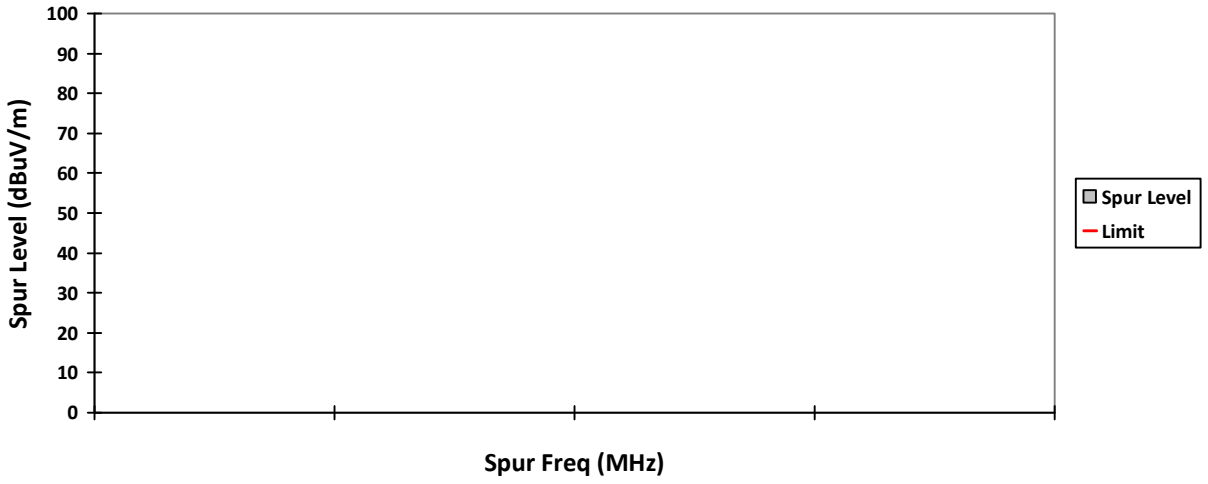
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11570	-	58.5483**	37.1**	-	74.0	54.0	-	15.4517 **	16.9 **	-
17355	-	65.2018**	-	-	68.2	-	-	2.9982 **	-	-
23140	-	43.3340**	-	-	68.2	-	-	24.866 **	-	-
28925	-	44.8320**	-	-	68.2	-	-	23.368 **	-	-
34710	-	45.5197**	-	-	68.2	-	-	22.6803 **	-	-
Horizontal Radiated Emission Result										
11570	-	58.4896**	37.05**	-	74.0	54.0	-	15.5104 **	16.95 **	-
17355	-	63.6361**	-	-	68.2	-	-	4.5639 **	-	-
23140	-	42.2109**	-	-	68.2	-	-	25.9891 **	-	-
28925	-	45.3533**	-	-	68.2	-	-	22.8467 **	-	-
34710	-	46.9325**	-	-	68.2	-	-	21.2675 **	-	-

Remarks: Pass Result	Marginal Result	Fail Result

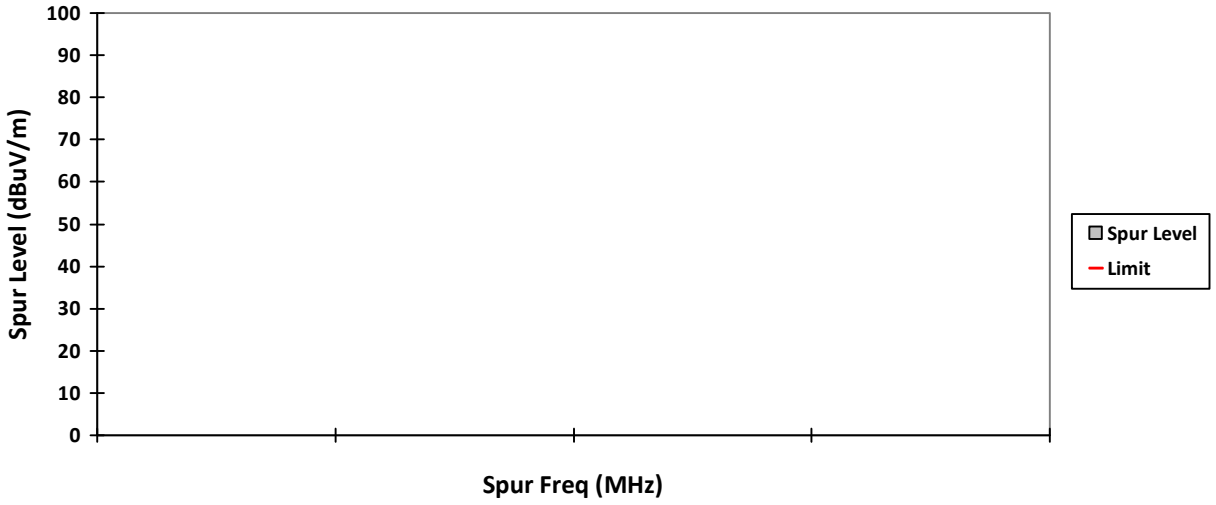
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Fri, 6 Aug, 2021**
System MU: 4.03dB

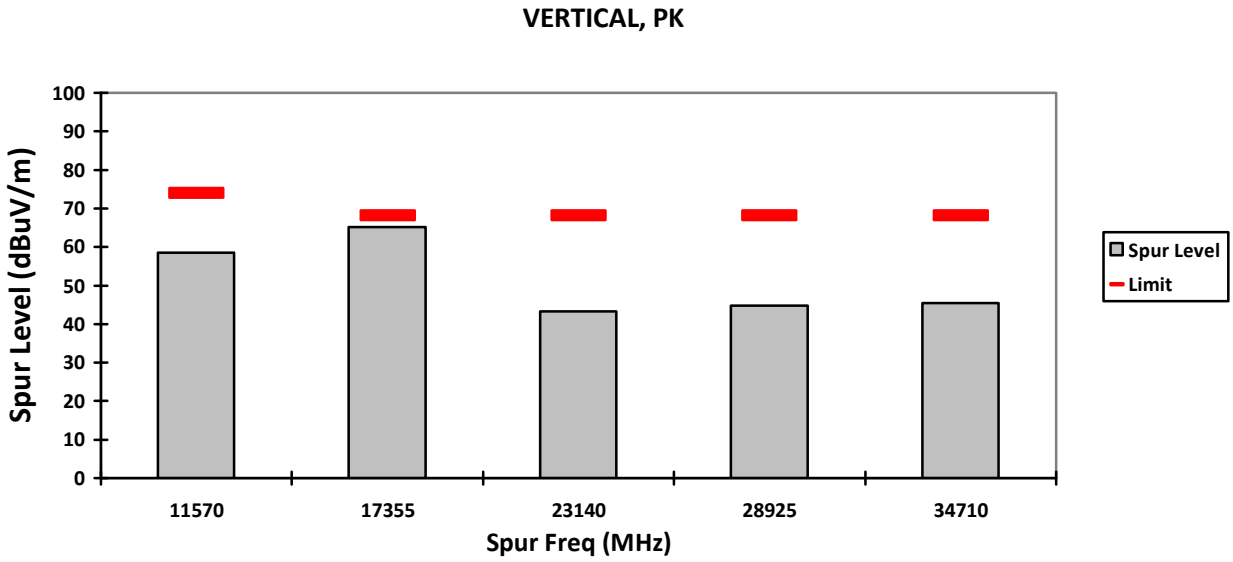
Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

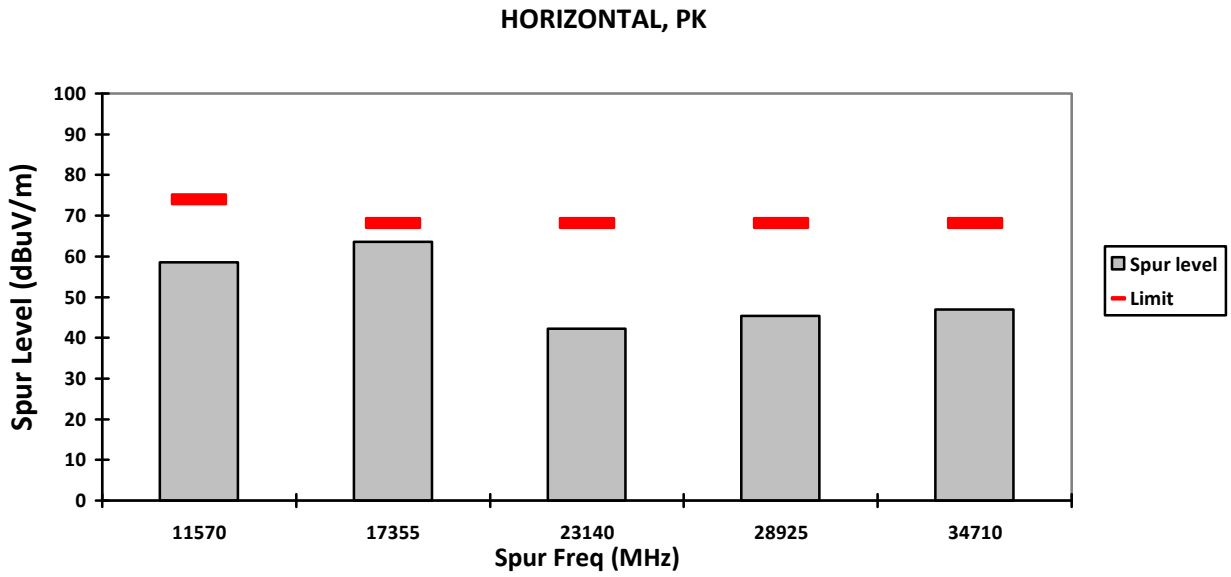
VERTICAL, QPK

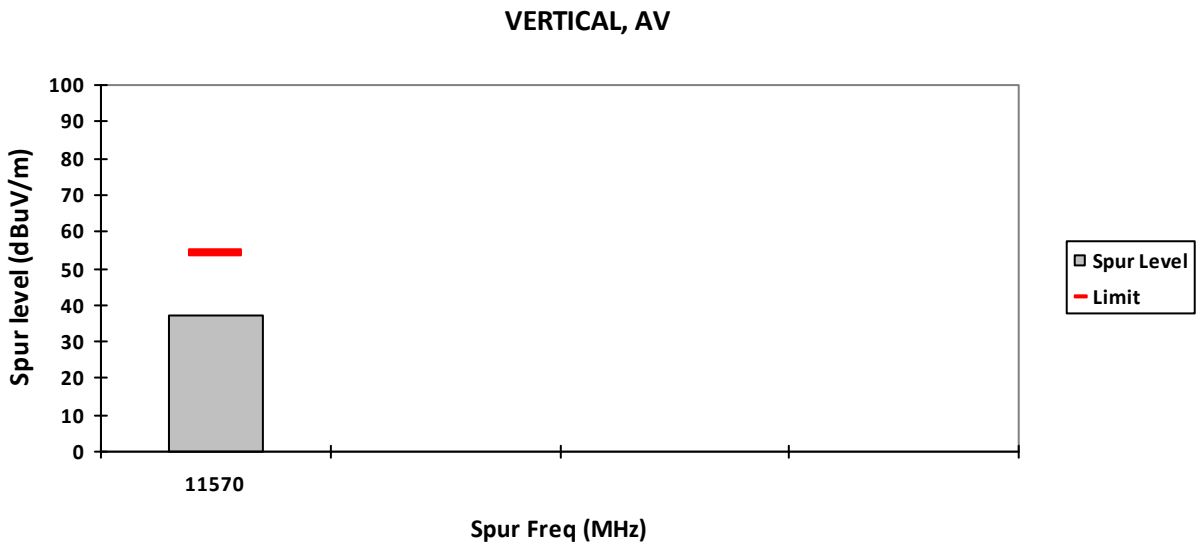


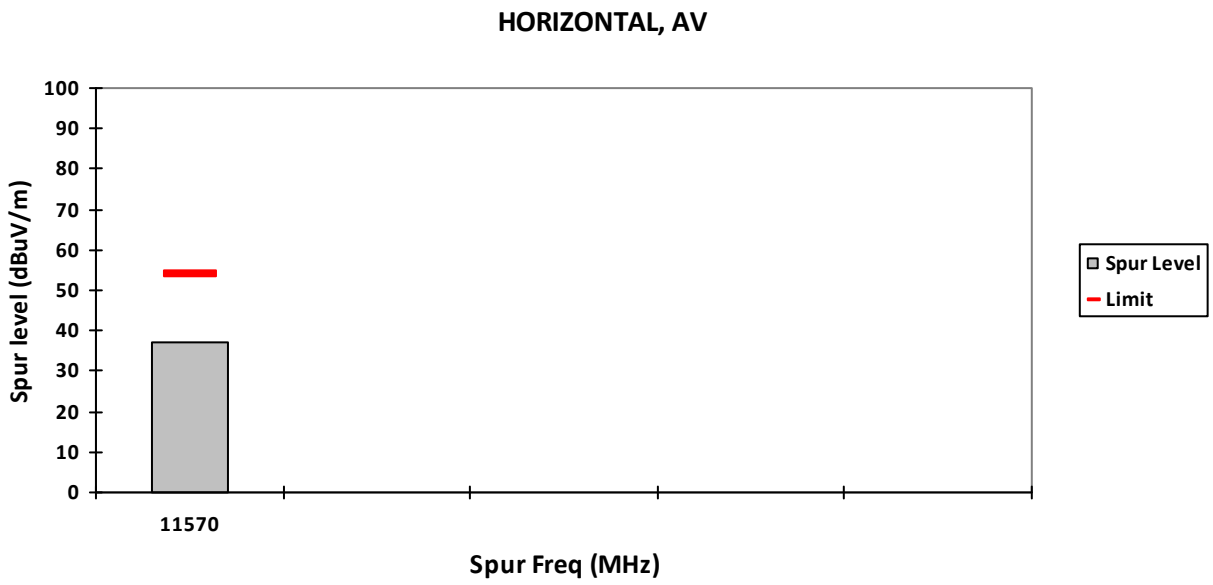
HORIZONTAL, QPK




VERTICAL, PK
Spur Level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
11570
17355
23140
28925
34710
Spur Freq (MHz)
Spur Level
Limit


HORIZONTAL, PK
Spur Level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
11570
17355
23140
28925
34710
Spur Freq (MHz)
Spur level
Limit


VERTICAL, AV
Spur level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
11570
Spur Freq (MHz)
Spur Level
Limit


HORIZONTAL, AV
Spur level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
11570
Spur Freq (MHz)
Spur Level
Limit

Test: WIFI SAC Transmitter Radiated Emission
Model#: AAH06RDN9RA1AN S/N: 865TXP0010 EMC SR ID#: 22639-EMC-00099
Battery: PMNN4810A Accessory: NA
Test Channel: High Test Frequency: 5825.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11n 20MHz)

Radiated Emission (High Channel) tabular data

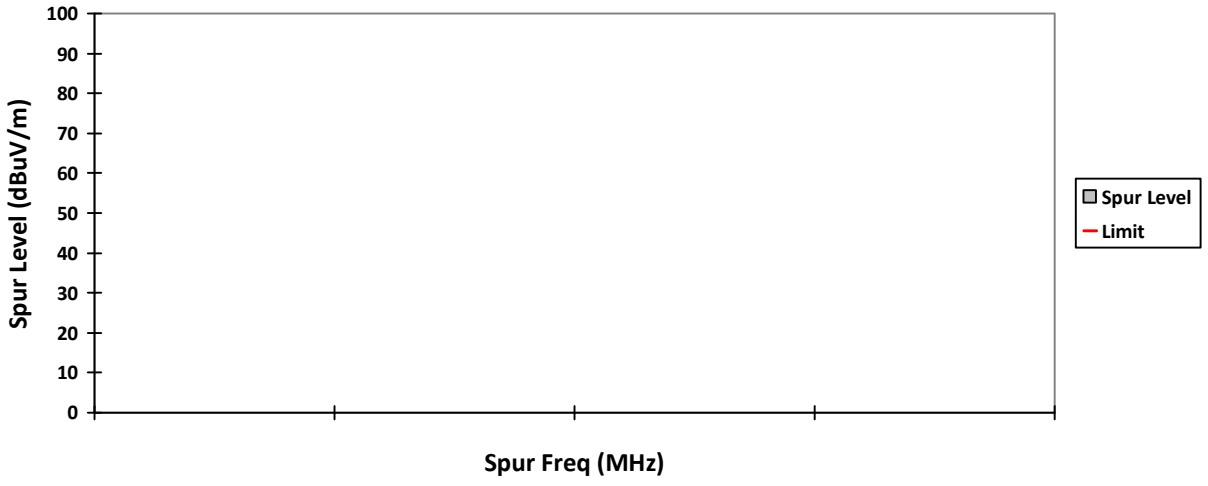
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11650	-	59.6290**	37.52**	-	74.0	54.0	-	14.371 **	16.48 **	-
17475	-	66.5803**	-	-	68.2	-	-	1.6197 **	-	-
23300	-	44.2339**	-	-	68.2	-	-	23.9661 **	-	-
29125	-	45.6153**	-	-	68.2	-	-	22.5847 **	-	-
34950	-	46.1835**	-	-	68.2	-	-	22.0165 **	-	-
Horizontal Radiated Emission Result										
11650	-	58.0077**	37.62**	-	74.0	54.0	-	15.9923 **	16.38 **	-
17475	-	64.9034**	-	-	68.2	-	-	3.2966 **	-	-
23300	-	43.8800**	-	-	68.2	-	-	24.32 **	-	-
29125	-	45.0008**	-	-	68.2	-	-	23.1992 **	-	-
34950	-	45.8100**	-	-	68.2	-	-	22.39 **	-	-

Remarks: Pass Result	Marginal Result	Fail Result

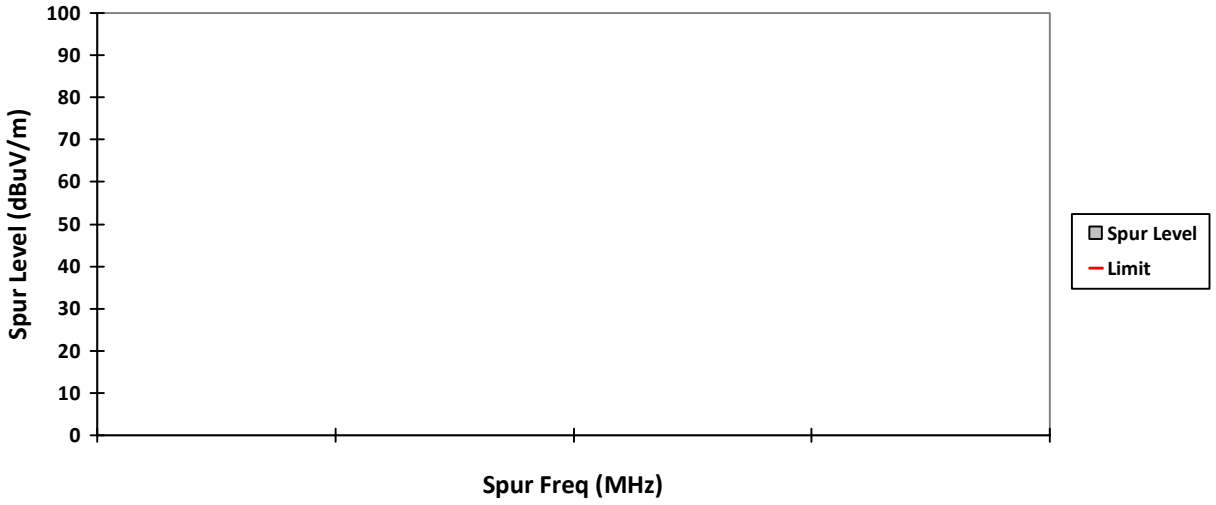
Temperature (degC): 23.3 **Humidity (%): 69.6**
Test Performed by: Amaluddin&Azil **Test Date: Fri, 6 Aug, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

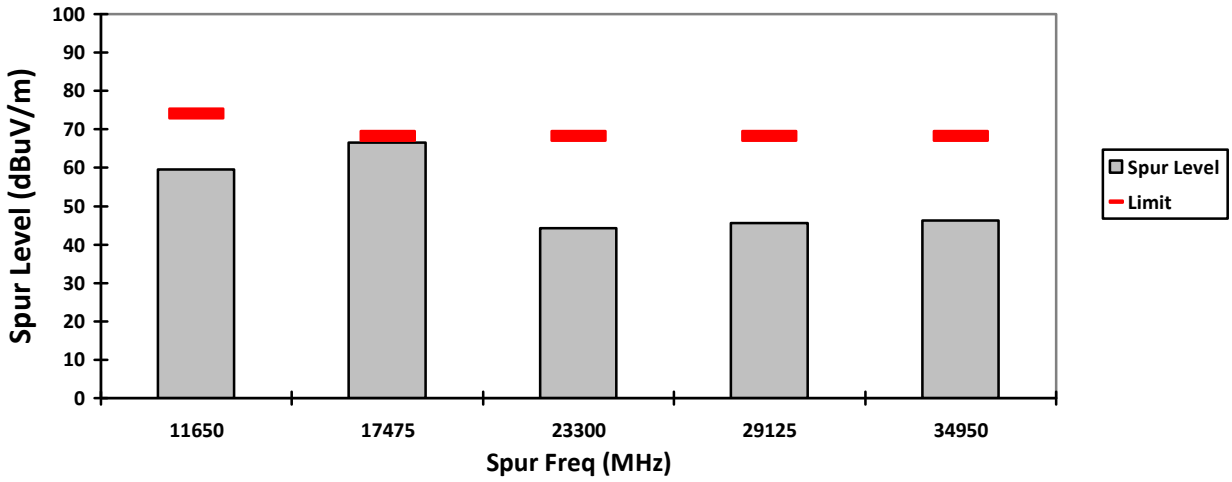
VERTICAL, QPK



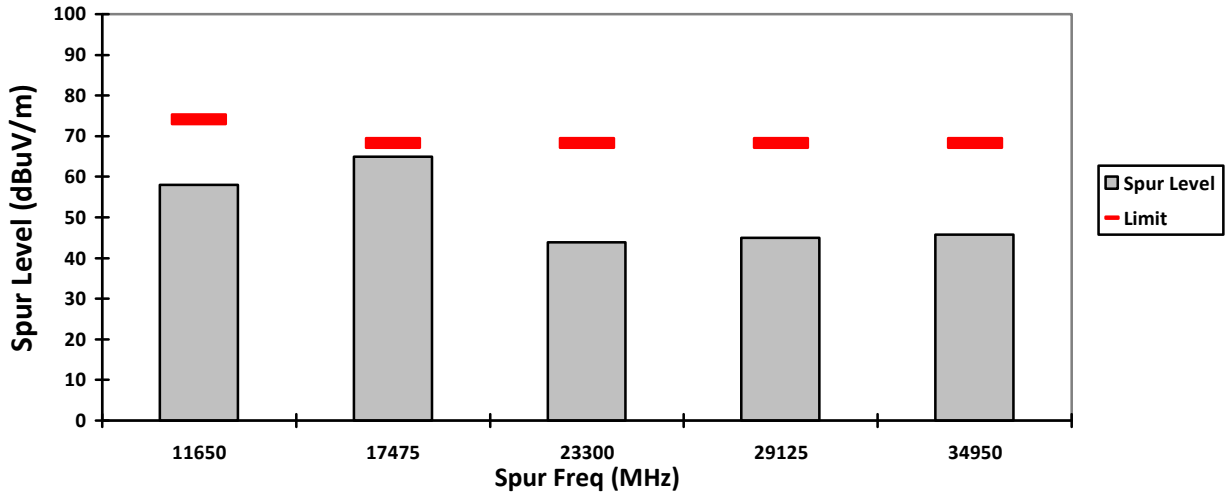
HORIZONTAL, QPK



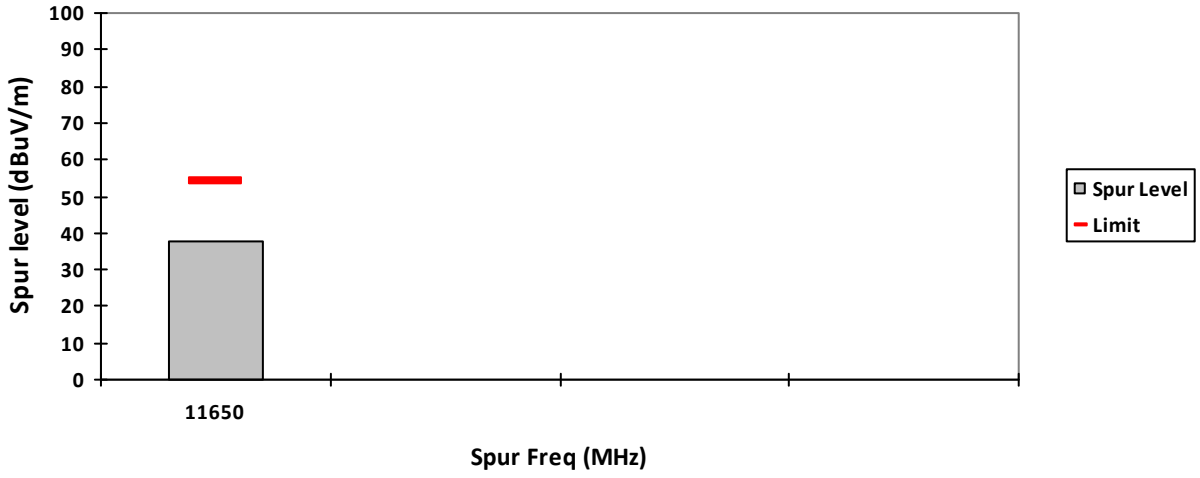
VERTICAL, PK



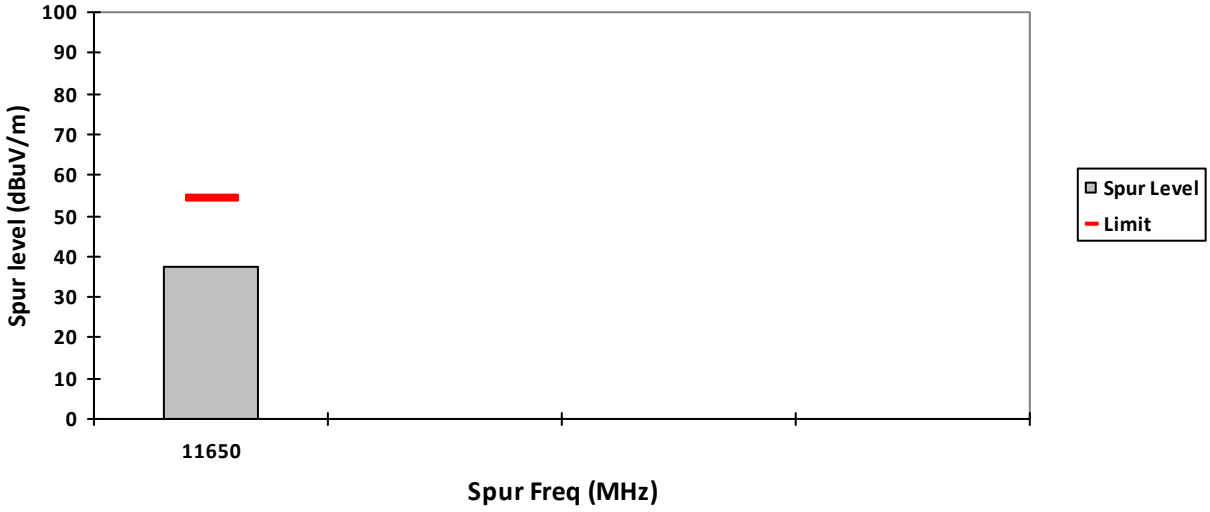
HORIZONTAL, PK



VERTICAL, AV

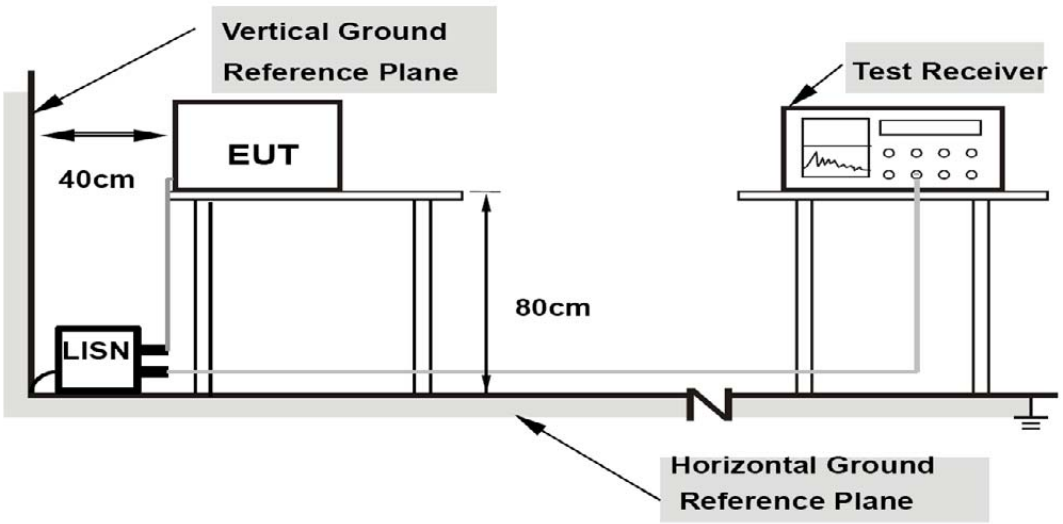


HORIZONTAL, AV



6.8. AC Powerline Conducted Emission

6.8.1. Test Setup



1) Tests were conducted for both Receive and Transmit Mode of the EUT.
2) The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/50uH of coupling impedance for the measuring instrument.
3) Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
4) The frequency range from 150 kHz to 30MHz was measured.

6.8.2. Test Limits

For AC Power Line Conducted Test Limit can be Class A or B depends on product classification.

Limits for conducted disturbance at the mains ports of class A ITE

Frequency range MHz	Limits dB(µV)	
	Quasi-peak	Average
0,15 to 0,50	79	66
0,50 to 30	73	60
NOTE The lower limit shall apply at the transition frequency.		

Table 1: Limits for Conducted Disturbance at the Mains Ports of Class A ITE.

Limits for conducted disturbance at the mains ports of class B ITE

Frequency range MHz	Limits dB(µV)	
	Quasi-peak	Average
0,15 to 0,50	66 to 56	56 to 46
0,50 to 5	56	46
5 to 30	60	50

NOTE 1 The lower limit shall apply at the transition frequencies.

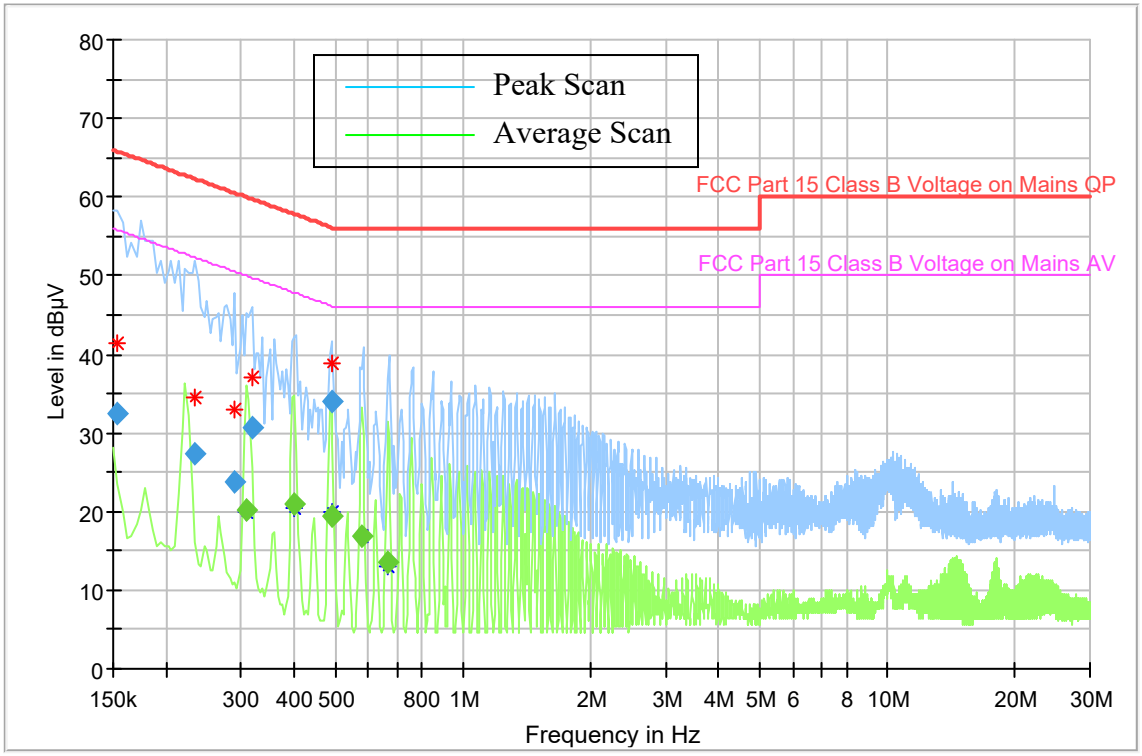
NOTE 2 The limit decreases linearly with the logarithm of the frequency in the range 0,15 MHz to 0,50 MHz.

Table 2: Limits for Conducted Disturbance at the Mains Ports of Class B ITE

6.8.3. Test Data

1) Charger + Radio in Wifi 5G Tx

Full Spectrum



Quasipeak and Average Measurement

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)	Comment
0.154000	32.53	---	65.78	33.25	1000.0	9.000	N	ON	10.2	PASS
0.234000	27.42	---	62.31	34.89	1000.0	9.000	N	ON	10.2	PASS
0.290000	23.77	---	60.52	36.76	1000.0	9.000	N	ON	10.2	PASS
0.310000	---	20.29	49.97	29.68	1000.0	9.000	L1	ON	10.1	PASS
0.318000	30.69	---	59.76	29.07	1000.0	9.000	L1	ON	10.1	PASS
0.402000	---	20.84	47.81	26.97	1000.0	9.000	L1	ON	10.1	PASS
0.490000	---	19.39	46.17	26.78	1000.0	9.000	L1	ON	10.1	PASS
0.490000	34.04	---	56.17	22.13	1000.0	9.000	L1	ON	10.1	PASS
0.578000	---	16.84	46.00	29.16	1000.0	9.000	L1	ON	10.1	PASS
0.666000	---	13.52	46.00	32.48	1000.0	9.000	L1	ON	10.1	PASS

*** Expanded Uncertainty (U) = +/- 3.48dB**

END OF TEST REPORT